



MIAMI-DADE COUNTY, FLORIDA
METRO-DADE FLAGLER BUILDING

BUILDING CODE COMPLIANCE OFFICE
METRO-DADE FLAGLER BUILDING
140 WEST FLAGLER STREET, SUITE 1603
MIAMI, FLORIDA 33130-1563
(305) 375-2901 FAX (305) 375-2908

CONTRACTOR LICENSING SECTION
(305) 375-2527 FAX (305) 375-2558

CONTRACTOR ENFORCEMENT DIVISION
(305) 375-2966 FAX (305) 375-2908

PRODUCT CONTROL DIVISION
(305) 375-2902 FAX (305) 372-6339

PRODUCT CONTROL NOTICE OF ACCEPTANCE

KML Windows, Inc.
23 Buchanan Court
London, On N5Z 4P9

Your application for Notice of Acceptance (NOA) of:

Aluminum Clad Wood Operable Casement Window - Non-Impact & Impact Resistant

under Chapter 8 of the Code of Miami-Dade County governing the use of Alternate Materials and Types of Construction, and completely described herein, has been recommended for acceptance by the Miami-Dade County Building Code Compliance Office (BCCO) under the conditions specified herein.

This NOA shall not be valid after the expiration date stated below. BCCO reserves the right to secure this product or material at any time from a jobsite or manufacturer's plant for quality control testing. If this product or material fails to perform in the approved manner, BCCO may revoke, modify, or suspend the use of such product or material immediately. BCCO reserves the right to revoke this approval, if it is determined by BCCO that this product or material fails to meet the requirements of the South Florida Building Code.

The expense of such testing will be incurred by the manufacturer.

ACCEPTANCE NO.: 00-1030.05
EXPIRES: 09/27/2004

Raul Rodriguez
Chief Product Control Division

THIS IS THE COVERSHEET, SEE ADDITIONAL PAGES FOR SPECIFIC AND GENERAL **CONDITIONS** **BUILDING CODE & PRODUCT REVIEW COMMITTEE**

This application for Product Approval has been reviewed by the BCCO and approved by the Building Code and Product Review Committee to be used in Miami-Dade County, Florida under the conditions set forth above.

Francisco J. Quintana, R.A.
Director
Miami-Dade County
Building Code Compliance Office

APPROVED: 09/27/2001



KML Windows, Inc.

ACCEPTANCE No.: 00-1030.05

APPROVED : SEP 27 2001

EXPIRES : SEP 27 2004

NOTICE OF ACCEPTANCE: SPECIFIC CONDITIONS

1. SCOPE

- 1.1** This approves a wood casement window, as described in Section 2 of this Notice of Acceptance, designed to comply with the South Florida Building Code, 1994 Edition for Miami-Dade County, for the locations where the pressure requirements, as determined by SFBC Chapter 23, do not exceed the Design Pressure Rating values indicated in the approved drawings.

2. PRODUCT DESCRIPTION

- 2.1** The **Aluminum Clad Wood Operable Casement Window– Non-Impact and Impact Resistant** and its components shall be constructed in strict compliance with the following documents: Drawing No **1003C**, Sheets 1 thru 10 of 10, titled "Aluminum Clad Wood Operable Casement Window (DADE)," prepared by W. W. Schaefer Engineering & Consulting, P.A., dated 9/25/00, signed and sealed by Warren W. Schaefer, P.E., bearing the Miami-Dade County Product Control approval stamp with the Notice of Acceptance number and approval date by the Miami-Dade County Product Control Division. These documents shall hereinafter be referred to as the approved drawings.

3. LIMITATIONS

- 3.1** This approval applies to single unit applications and side-by-side installations, as shown in approved drawings.

4. INSTALLATION

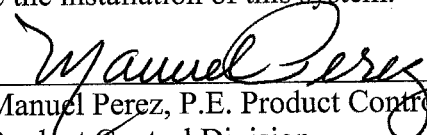
- 4.1** The wood casement window and its components shall be installed in strict compliance with the approved drawings.
- 4.1** Hurricane protection system (shutters): to determine whether the installation requires a hurricane protection system or not, see corresponding table in approved drawing.

5. LABELING

- 5.1** Each window unit shall bear a permanent label with the manufacturer's name or logo, city, state and following statement: "Miami-Dade County Product Control Approved".

6. BUILDING PERMIT REQUIREMENTS

- 6.1** Application for building permit shall be accompanied by copies of the following:
- 6.1.1** This Notice of Acceptance.
 - 6.1.2** Duplicate copies of the approved drawings, as identified in Section 2 of this Notice of Acceptance, clearly marked to show the components selected for the proposed installation.
 - 6.1.3** Any other documents required by the Building Official or the South Florida Building Code (SFBC) in order to properly evaluate the installation of this system.


Manuel Perez, P.E. Product Control Examiner
Product Control Division

KML Windows, Inc.

ACCEPTANCE No.: 00-1030.05

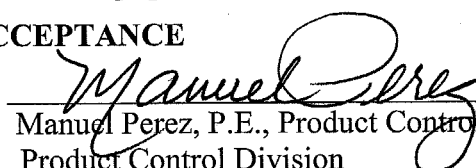
APPROVED : SEP 27 2001

EXPIRES : SEP 27 2004

NOTICE OF ACCEPTANCE: STANDARD CONDITIONS

1. Renewal of this Acceptance (approval) shall be considered after a renewal application has been filed and the original submitted documents, including test-supporting data, engineering documents, are no older than eight (8) years.
2. Any and all approved products shall be permanently labeled with the manufacturer's name, city, state, and the following statement: "Miami-Dade County Product Control Approval", or as specifically stated in the specific conditions of this Acceptance.
3. Renewals of Acceptance will not be considered if:
 - a. There has been a change in the South Florida Building Code affecting the evaluation of this product and the product is not in compliance with the code changes.
 - b. The product is no longer the same product (identical) as the one originally approved.
 - c. If the Acceptance holder has not complied with all the requirements of this acceptance, including the correct installation of the product.
 - d. The engineer who originally prepared, signed and sealed the required documentation initially submitted, is no longer practicing the engineering profession.
4. Any revision or change in the materials, use, and/or manufacture of the product or process shall automatically be cause for termination of this Acceptance, unless prior written approval has been requested (through the filing of a revision application with appropriate fee) and granted by this office.
5. Any of the following shall also be grounds for removal of this Acceptance:
 - a. Unsatisfactory performance of this product or process,
 - b. Misuse of this Acceptance as an endorsement of any product, for sales, advertising or any other purposes.
6. The Notice of Acceptance number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the Notice of Acceptance is displayed, then it shall be done in its entirety.
7. A copy of this Acceptance as well as approved drawings and other documents, where it applies, shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at all time. The engineer need not reseal the copies.
8. Failure to comply with any section of this Acceptance shall be cause for termination and removal of Acceptance.
9. This Notice of Acceptance consists of pages 1, 2 and this last page 3.

END OF THIS ACCEPTANCE


Manuel Perez, P.E., Product Control Examiner
Product Control Division

KML Windows, Inc.

ACCEPTANCE No.: 00-1030.05

APPROVED : SEP 27 2001

EXPIRES : SEP 27 2004

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

(For File ONLY. Not part of NOA.)

A DRAWINGS

1. Manufacturer's die drawings and sections.
2. Drawing No **1003C**, Sheets 1 thru 10 of 10, titled "Aluminum Clad Wood Operable Casement Window (DADE)," prepared by W. W. Schaefer Engineering & Consulting, P.A., dated 9/25/00, signed and sealed by Warren W. Schaefer, P.E.

B TESTS

1. Test reports on:
 - 1) Air Infiltration Test, per SFBC, PA 202-94.
 - 2) Uniform Load Static Air Pressure Test, per SFBC, PA 202-94.
 - 3) Water Resistance Test, per SFBC, PA 202-94.
 - 4) Forced Entry Resistance Test, per AAMA 1302.5.
 - 5) Large Missile Impact Test, per SFBC, PA 201-94.
 - 6) Cyclic Wind Pressure Loading Test, per SFBC, PA 203-94.along with installation diagram of aluminum clad wood operable casement windows of different shapes, prepared by Intertek Testing Services, Inc., Report No. **ITS-J990225770-231-05**, dated October 10, 2000, signed and sealed by Douglas Keith Tucker, P.E.
2. Test reports on:
 - 1) Air Infiltration Test, per PA 202-94
 - 2) Uniform Static Air Pressure Test, Loading per PA 202-94.
 - 3) Water Resistance Test, per PA 202-94.along with installation diagram of aluminum clad wood operable casement windows of different shapes, prepared by Intertek Testing Services Inc., Test Report No. **J99022770-231-06**, dated October 11, 2000, signed and sealed by Douglas Keith Tucker, P.E
Addendum letter dated March 20, 2001, signed and sealed by Douglas Keith Tucker, P.E

C CALCULATIONS

1. Anchor Calculations, prepared by W. W. Schaefer Engineering & Consulting, P.A., dated 9/25/00, signed and sealed by Warren W. Schaefer, PE.

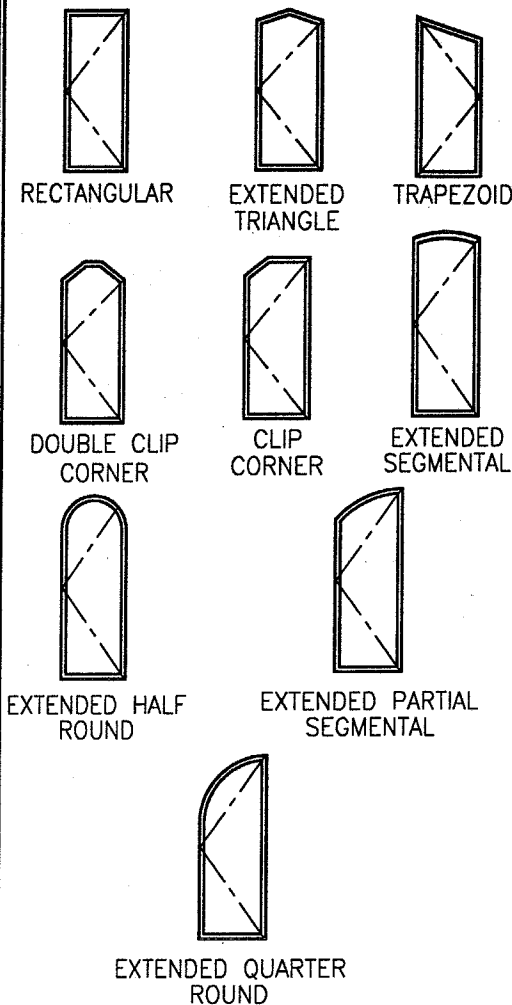
D MATERIAL CERTIFICATIONS

1. Notice of Acceptance No. **96-0904.06** issued to E.I. DuPont DeNemours for "Laminated Glass with Butalite" dated 12/11/97, expiring on 12/11/00.
2. Notice of Acceptance No. **97-0527.04** issued to Nebula Glass International, Inc. for "Glasslam Safety-Plus Laminated Glass " dated 9/9/97, expiring on 9/9/00.

E STATEMENTS

1. Statement letter of conformance, dated 10/19/00, signed and sealed by Warren W. Schaefer, P.E.
2. Statement letter of no financial interest, dated 10/19/00, signed and sealed by Warren W. Schaefer, P.E.


Manuel Perez, P.E. Product Control Examiner
Product Control Division



SHAPES CONSIDERED AS PART OF THIS APPROVAL FOR BOTH IMPACT & NON-IMPACT

GENERAL NOTES

1. THESE WINDOW SYSTEMS HAVE BEEN TESTED, ANALYZED AND APPROVED FOR DESIGN PRESSURES NOT TO EXCEED THOSE SHOWN IN THE "ALLOWABLE DESIGN LOADS" TABLES.
2. BUCKING, OPENINGS & BUCKING FASTENERS MUST BE DESIGNED & INSTALLED TO WITHSTAND WIND LOADS AS DETERMINED FOR EA. APPLICATION
3. ALL HARDWARE & FASTENERS SHALL BE IN ACCORDANCE WITH THESE DRAWINGS & MAY NOT VARY UNLESS SPECIFICALLY MENTIONED ON THE DRAWINGS.
4. THE DETAILS & SPECIFICATIONS SHOWN HEREIN REPRESENT THE PRODUCTS PROPOSED FOR WATER, AIR, IMPACT, CYCLIC & UNIFORM STATIC AIR PRESSURE TESTING IN CONFORMANCE WITH DADE COUNTY PROTOCOLS PA 201, 202 & 203 FOR BOTH IMPACT & NON-IMPACT WINDOWS.
5. ALL JAMB TO BUCKING SHEAR FASTENERS MUST PENETRATE BUCK A MINIMUM OF 1 1/4". IF PENETRATION IS LESS THAN 1 1/4" THEN SCREW LENGTH SHALL INCREASE AS REQUIRED.
6. THESE WINDOW SYSTEMS HAVE BEEN DESIGNED IN ACCORDANCE WITH THE SOUTH FLORIDA BUILDING CODE, 1994 EDITION.
7. THIS PRODUCT HAS BEEN TESTED IN ACCORDANCE WITH DADE COUNTY PROTOCOLS PA-201, PA-202 & PA-203 FOR LARGE MISSILE IMPACT, STRUCTURAL & CYCLIC TESTING.
8. FOR ALL NON-IMPACT WINDOWS, MIAMI-DADE COUNTY APPROVED SHUTTERS ARE REQUIRED.

NOTE: NUMBER OF LATCH POINTS & BUTT HINGES MAY VARY WITH UNIT HEIGHT PROVIDING END DISTANCES & SPACINGS DO NOT EXCEED THE MAXIMUMS SHOWN IN THESE ELEVATIONS.

NOTE: FOR COMBINATION OF UNITS, SEE SHT. 3 & MULLION DRAWING NO. 1003E UNDER SEPERATE APPROVAL.

LATCH & HINGE QUANTITY TABLE

WINDOW HEIGHT	NUMBER OF LATCH POINTS REQ'D	NUMBER OF HINGES REQ'D
36"	2	2
42"	3	2
48"	3	2
54"	3	3
60"	4	3
66"	4	3
73"	5	3
78"	5	3
84"	5	3

1. IF THE WINDOW HEIGHT FALLS BETWEEN HEIGHTS IN THIS TABLE, THE TALLER TABLE HEIGHT SHALL BE USED.
2. THE MINIMUM NUMBER OF LATCH POINTS OR HINGES USED MAY NOT BE LESS THAN 2 FOR WINDOWS SHORTER THAN 36".

ALLOWABLE DESIGN LOADS

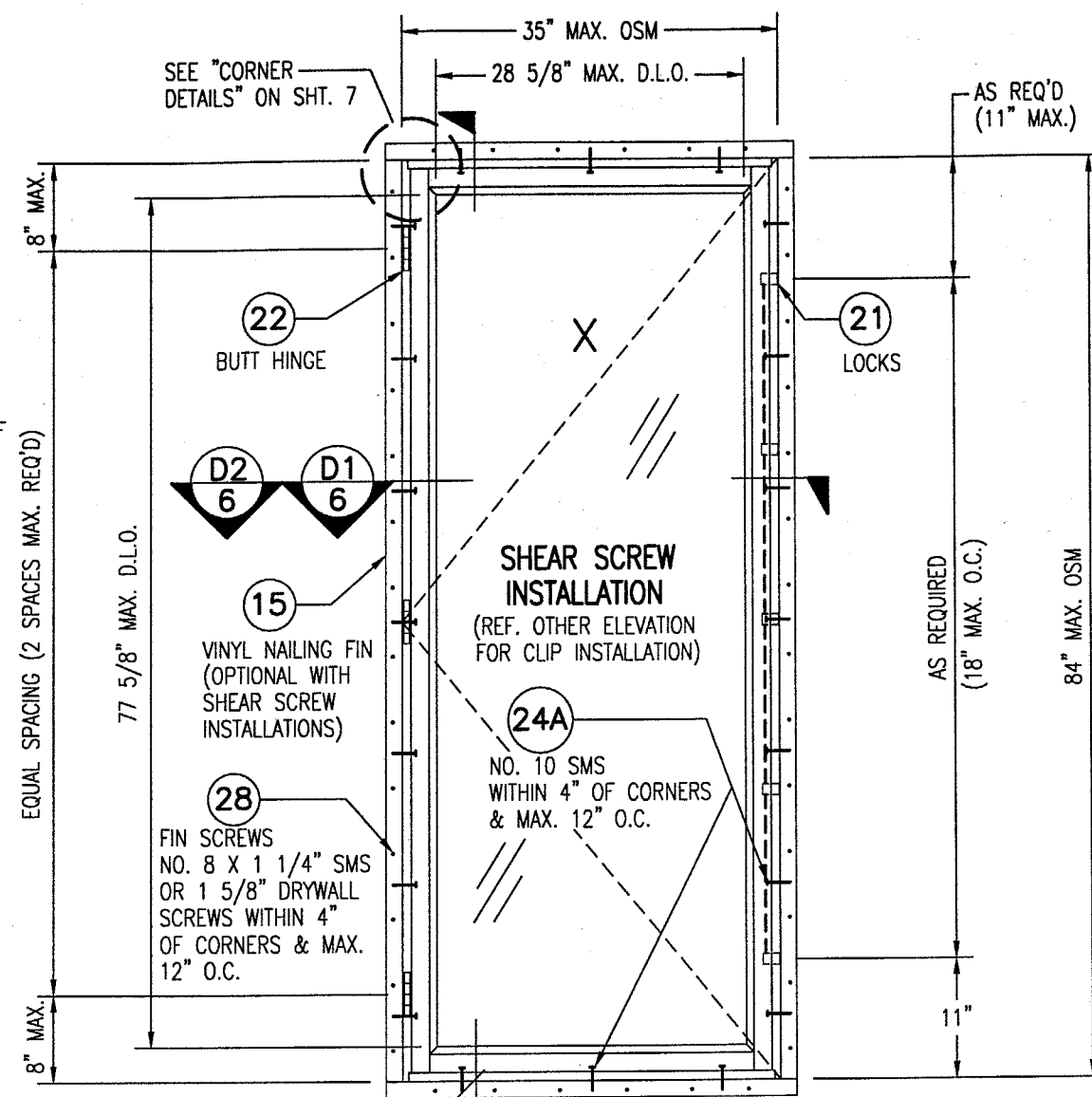
NON-IMPACT UNITS	IMPACT UNITS	
	RECTANGULAR	SHAPED
SEE "NON-IMPACT LOAD TABLE ON SHEET 9.	WINDOW HEIGHT 73" & LESS	WINDOW HEIGHT GREATER THAN 73"
	+65/-70 PSF	+65/-56.6 PSF
		+65/-50 PSF

JAMB FASTENER MIN. EMBEDMENT INTO OPENING OR BUCK

NO. 10 SMS SCREWS INTO BUCK = 1 3/8"
1/4" TAPCON INTO CONCRETE/BLOCK = 1 1/4"

JAMB FASTENER MINIMUM EDGE DISTANCE AT OPENING OR BUCK

WOOD BUCK = 1"
CONCRETE/BLOCK = 2"



ALL ELEVATIONS VIEWED FROM EXTERIOR

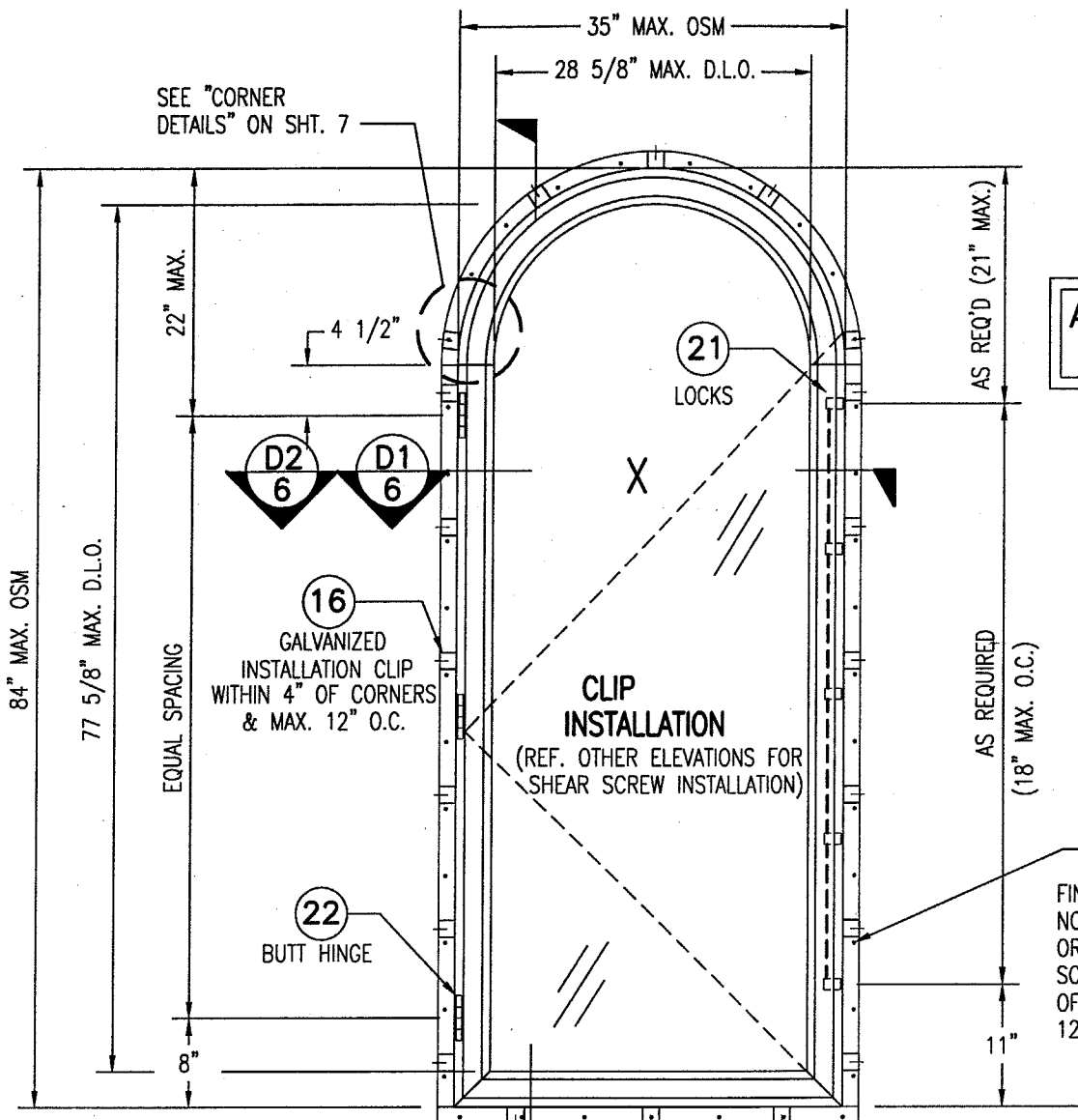
35" X 84" OPERABLE
RECTANGULAR CASEMENT

SCALE: 3/4" = 1'-0"

SEE "LATCH & HINGE QUANTITY TABLE" ON THIS SHEET FOR REQUIRED NUMBER OF LATCH POINTS &/OR HINGES FOR DIFFERENT WINDOW HEIGHTS.

APPROVED AS COMPLYING WITH THE SOUTH FLORIDA BUILDING CODE
DATE SEP 27 2001
BY Warren W. Schaefer
PRODUCT CONTROL DIVISION
BUILDING CODE COMPLIANCE OFFICE
ACCEPTANCE NO. 10030-05

DRAWN BY: W.W.S.		DATE: 09/25/00	
CHECKED BY: W.W.S.		DATE: 09/25/00	
PLOT: 1=24			
DATE	BY	REVISION DESCRIPTION	NO.
<p>ALUMINUM CLAD WOOD OPERABLE CASEMENT WINDOWS (DADE)</p> <p>MANUFACTURER: KML WINDOWS, INC. 23 BUCHANAN COURT LONDON, ONTARIO, CANADA N5Z4P9 (519)681-7012</p> <p>CONSULTANTS: W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. 600 SANDTREE DRIVE, SUITE 203B PALM BEACH GARDENS, FL 33403 PHONE: 561-775-4902 FAX: 561-775-4903</p> <p>CERTIFICATION: AUG 30 2001</p> <p>WARREN W. SCHAEFER, P.E. P.E. NO. 44135</p>			
DRAWING NO. 1003C		REV. 1	
SHEET NO. 1		OF 10	



ALL ELEVATIONS VIEWED FROM EXTERIOR

35" X 84" EXTENDED HALF ROUND CASEMENT

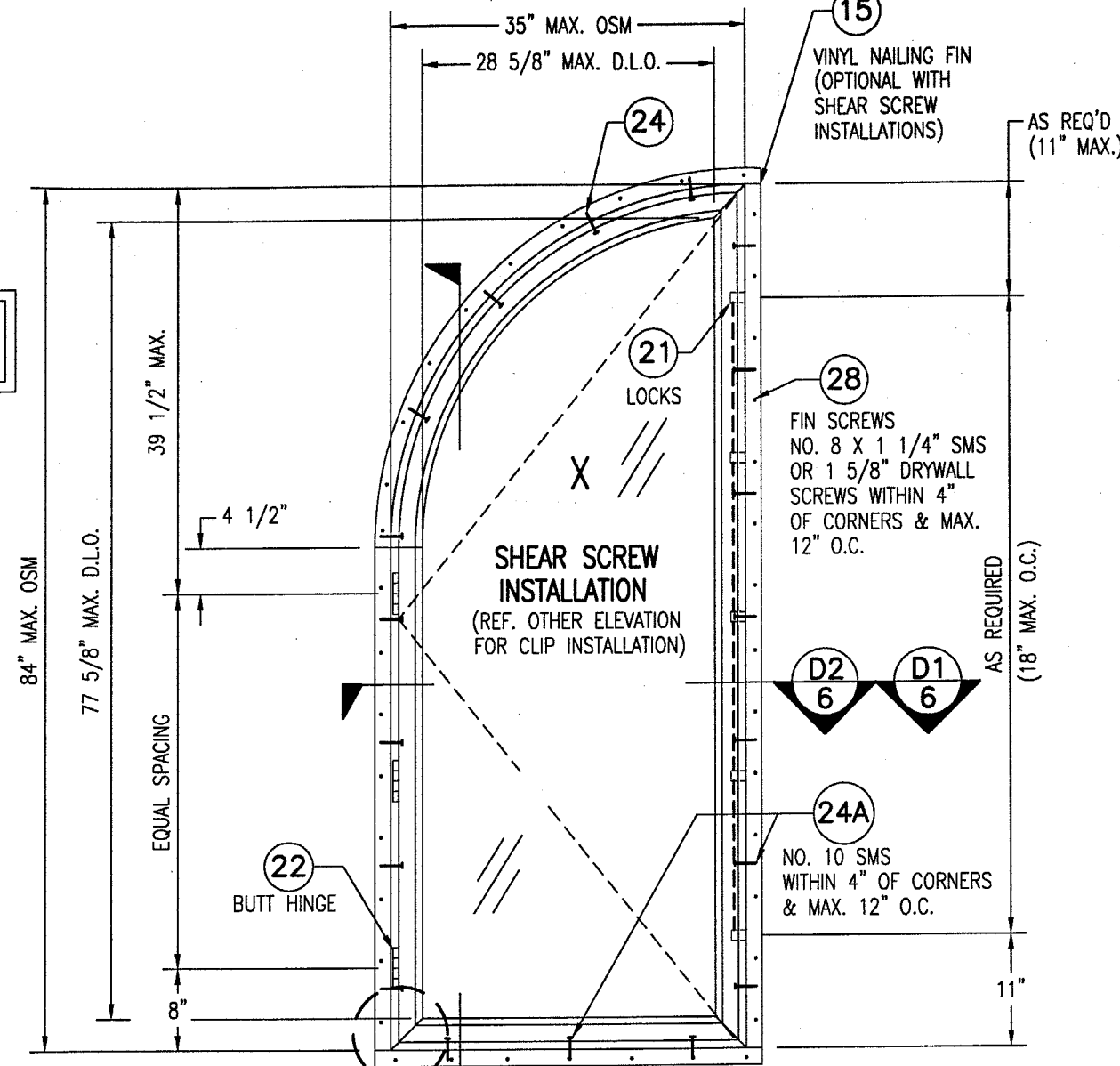
SCALE: 3/4" = 1'-0"

SEE "LATCH & HINGE QUANTITY TABLE" ON SHEET NO. 1 FOR REQUIRED NUMBER OF LATCH POINTS &/OR HINGES FOR DIFFERENT WINDOW HEIGHTS.

ALLOWABLE DESIGN LOADS			
NON-IMPACT UNITS	IMPACT UNITS		
	RECTANGULAR	SHAPED	
SEE "NON-IMPACT LOAD TABLE ON SHEET 9.	WINDOW HEIGHT 73" & LESS	WINDOW HEIGHT GREATER THAN 73"	
	+65/-70 PSF	+65/-56.6 PSF	+65/-50 PSF

NOTE: NUMBER OF LATCH POINTS & BUTT HINGES MAY VARY WITH UNIT HEIGHT PROVIDING END DISTANCES & SPACINGS DO NOT EXCEED THE MAXIMUMS SHOWN IN THESE ELEVATIONS.

FOR JAMB FASTENER EMBED & EDGE DISTANCE REQUIREMENTS, SEE SHEET 1



35" X 84" EXTENDED QUARTER ROUND CASEMENT

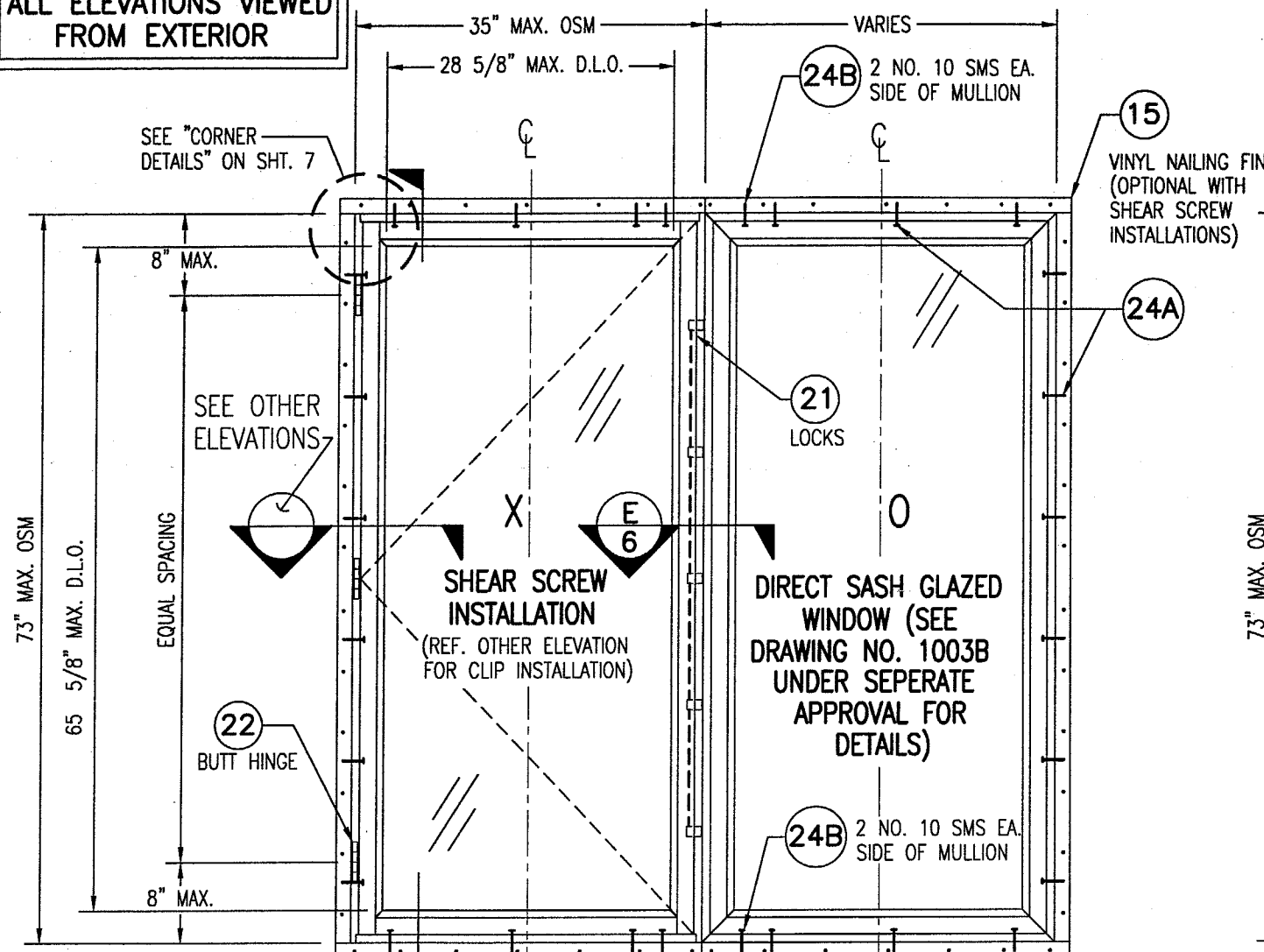
SCALE: 3/4" = 1'-0"

SEE "LATCH & HINGE QUANTITY TABLE" ON SHEET NO. 1 FOR REQUIRED NUMBER OF LATCH POINTS &/OR HINGES FOR DIFFERENT WINDOW HEIGHTS.

APPROVED AS COMPLYING WITH THE SOUTH FLORIDA BUILDING CODE
 DATE **SEP 27 2001**
 BY *[Signature]*
 PRODUCT CONTROL DIVISION
 BUILDING CODE COMPLIANCE OFFICE
 ACCEPTANCE NO. **00-1030-05**

DRAWN BY: W.W.S.		DATE: 09/25/00	
CHECKED BY: W.W.S.		DATE: 09/25/00	
PLOT: 1-24			
NO.	REVISION	DESCRIPTION	DATE
DRAWING TITLE: ALUMINUM CLAD WOOD OPERABLE CASEMENT WINDOWS (DADE)			
CONSULTANTS: W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. 500 SANDTREE DRIVE, SUITE 203B PALM BEACH GARDENS, FL 33403 PHONE: 561-775-4902 FAX: 561-775-4903			
MANUFACTURER: KML WINDOWS, INC. 23 BUCHANAN COURT LONDON, ONTARIO, CANADA N5Z4P9 (519) 681-7012			
CERTIFICATION: AUG 30 2001		DRAWING NO. 1003C	
SHEET NO. 2		REV. 10	

ALL ELEVATIONS VIEWED FROM EXTERIOR



**35" X 73" OPERABLE WITH
60" X 73" FIXED CASEMENT**

SCALE: 3/4" = 1'-0"

(FOR WINDOW DETAILS & DIMENSIONS NOT SHOWN, SEE OTHER ELEVATIONS)

SEE "LATCH & HINGE QUANTITY TABLE"
ON SHEET 1 FOR REQUIRED NUMBER OF
LATCH POINTS &/OR HINGES
FOR DIFFERENT WINDOW HEIGHTS.

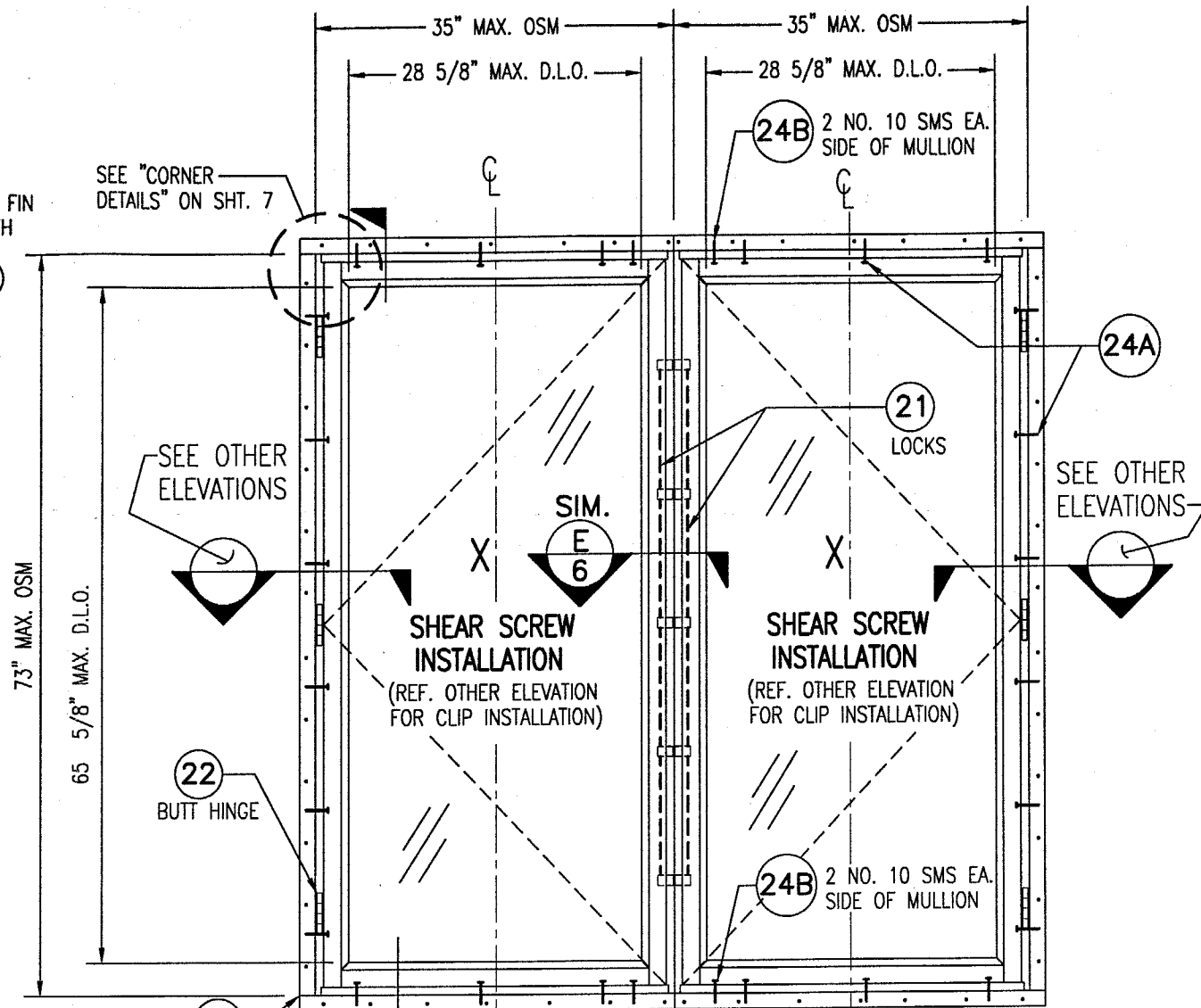
FOR JAMB FASTENER EMBED & EDGE DISTANCE
REQUIREMENTS, SEE SHEET 1

ALLOWABLE DESIGN LOADS (MULLED UNITS ONLY)

ALLOWABLE DESIGN LOAD ON MULLED UNITS SHALL BE
THE LESSER OF +65/-70 PSF OR AS CONTROLLED
BY THE INDIVIDUAL WINDOW (SEE LOAD TABLE ON
SHEETS 1 & 9 FOR ALLOWABLE WINDOW LOADS).

NOTE: NUMBER OF LATCH POINTS
& BUTT HINGES MAY VARY WITH UNIT HEIGHT
PROVIDING END DISTANCES & SPACINGS DO
NOT EXCEED THE MAXIMUMS SHOWN IN THESE
ELEVATIONS.

NOTE: FOR OTHER COMBINATIONS
OF UNITS, SEE MULLION
DRAWING NO. 1003E



**35" X 73" OPERABLE WITH
35" X 73" OPERABLE CASEMENT**

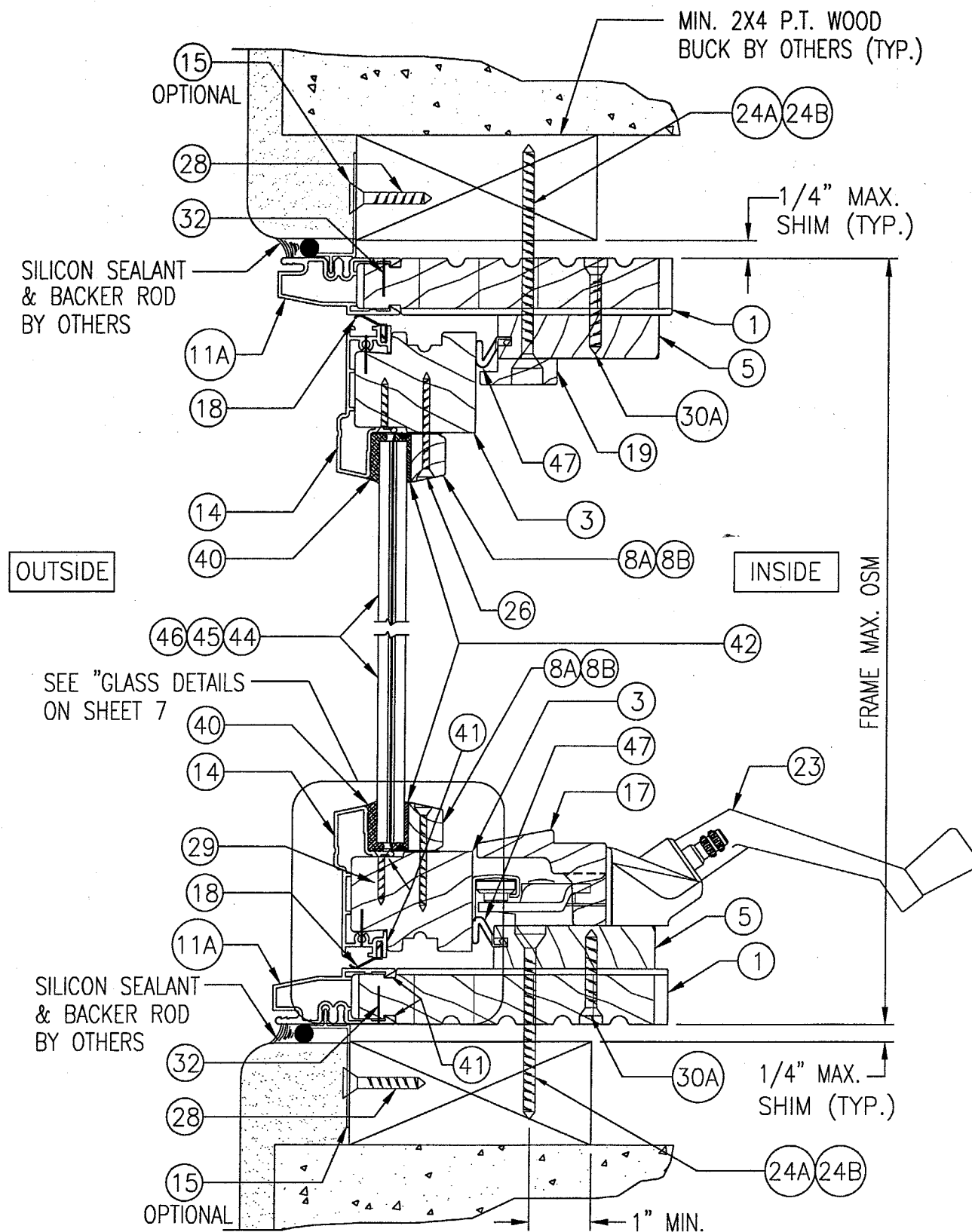
SCALE: 3/4" = 1'-0"

(FOR WINDOW DETAILS & DIMENSIONS NOT SHOWN, SEE OTHER ELEVATIONS)

SEE "LATCH & HINGE QUANTITY TABLE"
ON SHEET 1 FOR REQUIRED NUMBER OF
LATCH POINTS &/OR HINGES
FOR DIFFERENT WINDOW HEIGHTS.

APPROVED AS COMPLYING WITH THE
SOUTH FLORIDA BUILDING CODE
DATE **SEP 27 2001**
BY *Warren W. Schaefer*
PRODUCT CONTROL DIVISION
BUILDING CODE COMPLIANCE OFFICE
ACCEPTANCE NO. **00-1030-05**

DRAWN BY: W.W.S.		DATE: 09/25/00	
CHECKED BY: W.W.S.		DATE: 09/25/00	
PLOT: 1=24			
NO.	REVISION DESCRIPTION	BY	DATE
DRAWING TITLE: ALUMINUM CLAD WOOD OPERABLE CASEMENT WINDOWS (DADE)		MANUFACTURER: KML WINDOWS, INC.	
CONSULTANTS: W. W. SCHAEFER ENGINEERING & CONSULTING, P.A.		23 BUCHANAN COURT LONDON, ONTARIO, CANADA N5Z4P9 (519)681-7012	
CERTIFICATION: AUG 30 2001		WARREN W. SCHAEFER, P.E. P.E. NO. 44135	
DRAWING NO. 1003C		REV.	
SHEET NO. 3		OF 10	

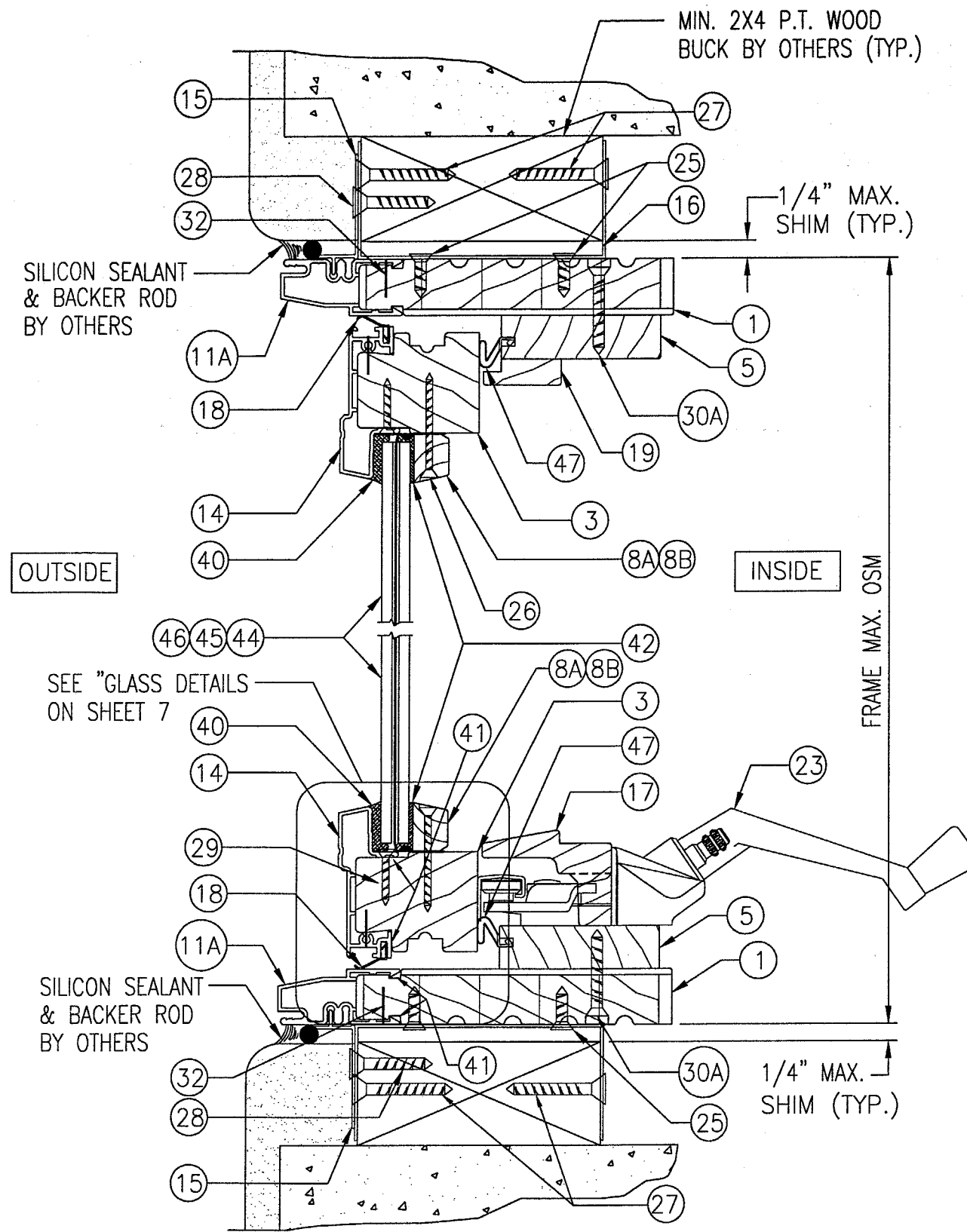


SECTION

A1
4

SCALE: HALF FULL SIZE
SEE "OPTIONAL JAMB DETAIL" ON
SHEET 7 FOR DIRECT MOUNT TO
BLOCK OR CONCRETE.

SHEAR SCREW
INSTALLATION



SECTION

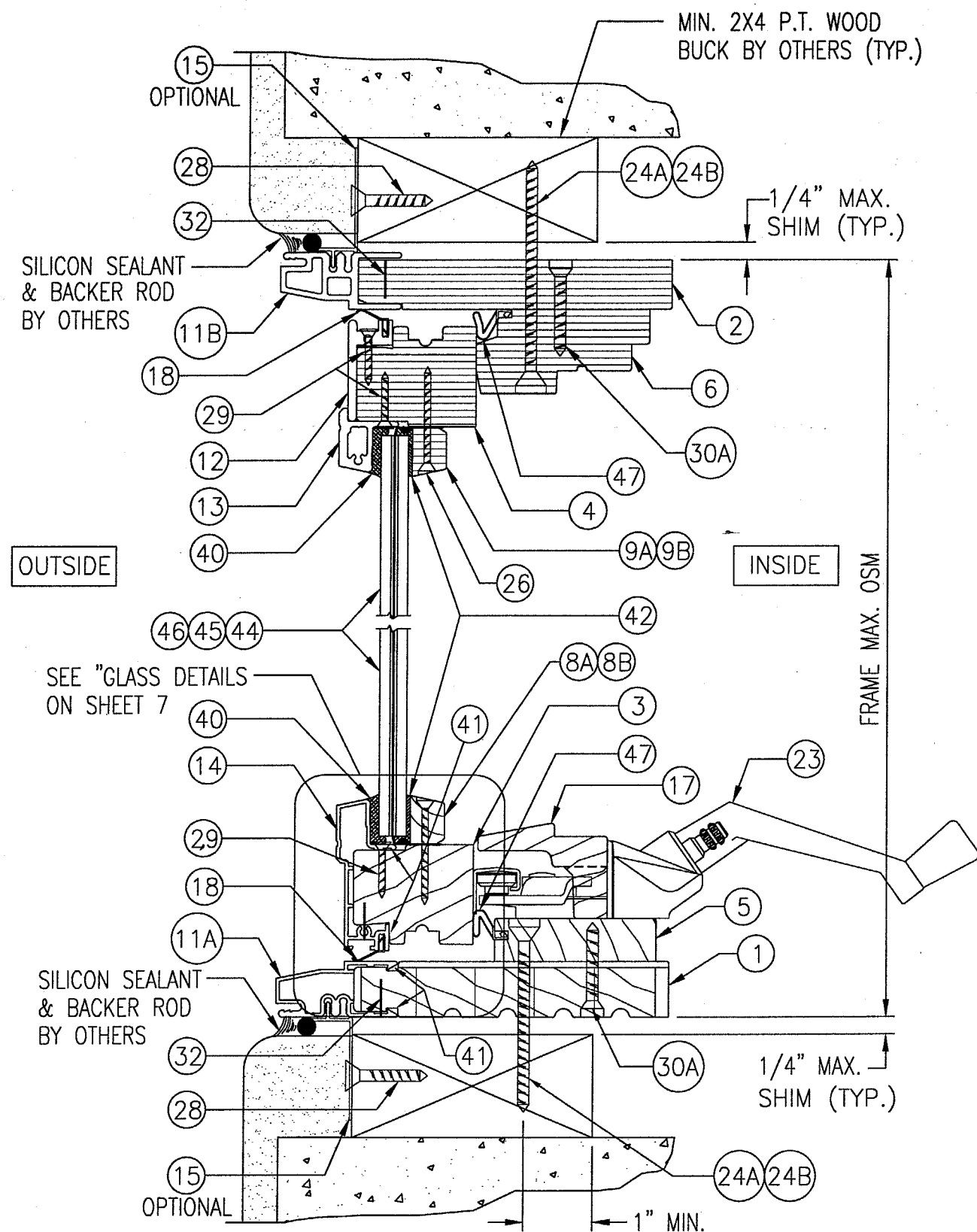
A2
4

SCALE: HALF FULL SIZE

CLIP
INSTALLATION

APPROVED AS COMPLYING WITH THE
SOUTH FLORIDA BUILDING CODE
DATE **SEP 27 2001**
BY *Manuel Perez*
PRODUCT CONTROL DIVISION
BUILDING CODE COMPLIANCE OFFICE
ACCEPTANCE NO. **00-1030-05**

DRAWING TITLE		DRAWN BY: W.W.S.		DATE: 09/25/00	
ALUMINUM CLAD WOOD OPERABLE CASEMENT WINDOWS (DADE)		CHECKED BY: W.W.S.		DATE: 09/25/00	
CONSULTANTS		PLOT: 2:1			
W. W. SCHAEFER ENGINEERING & CONSULTING, P.A.		NO.			
600 SANDTREE DRIVE, SUITE 203B		REVISION DESCRIPTION			
PALM BEACH GARDENS, FL 33403		DATE			
PHONE: 561-775-4902 FAX: 561-775-4903		BY			
MANUFACTURER		NO.			
KML WINDOWS, INC.		REVISION DESCRIPTION			
23 BUCHANAN COURT		DATE			
LONDON, ONTARIO, CANADA N5Z4P9		NO.			
(519)681-7012		REVISION DESCRIPTION			
CERTIFICATION		DATE			
AUG 30 2001		BY			
WARREN W. SCHAEFER, P.E.		NO.			
P.E. NO. 44135		REVISION DESCRIPTION			
DRAWING NO. 1003C		DATE			
SHEET NO. 4 OF 10		NO.			

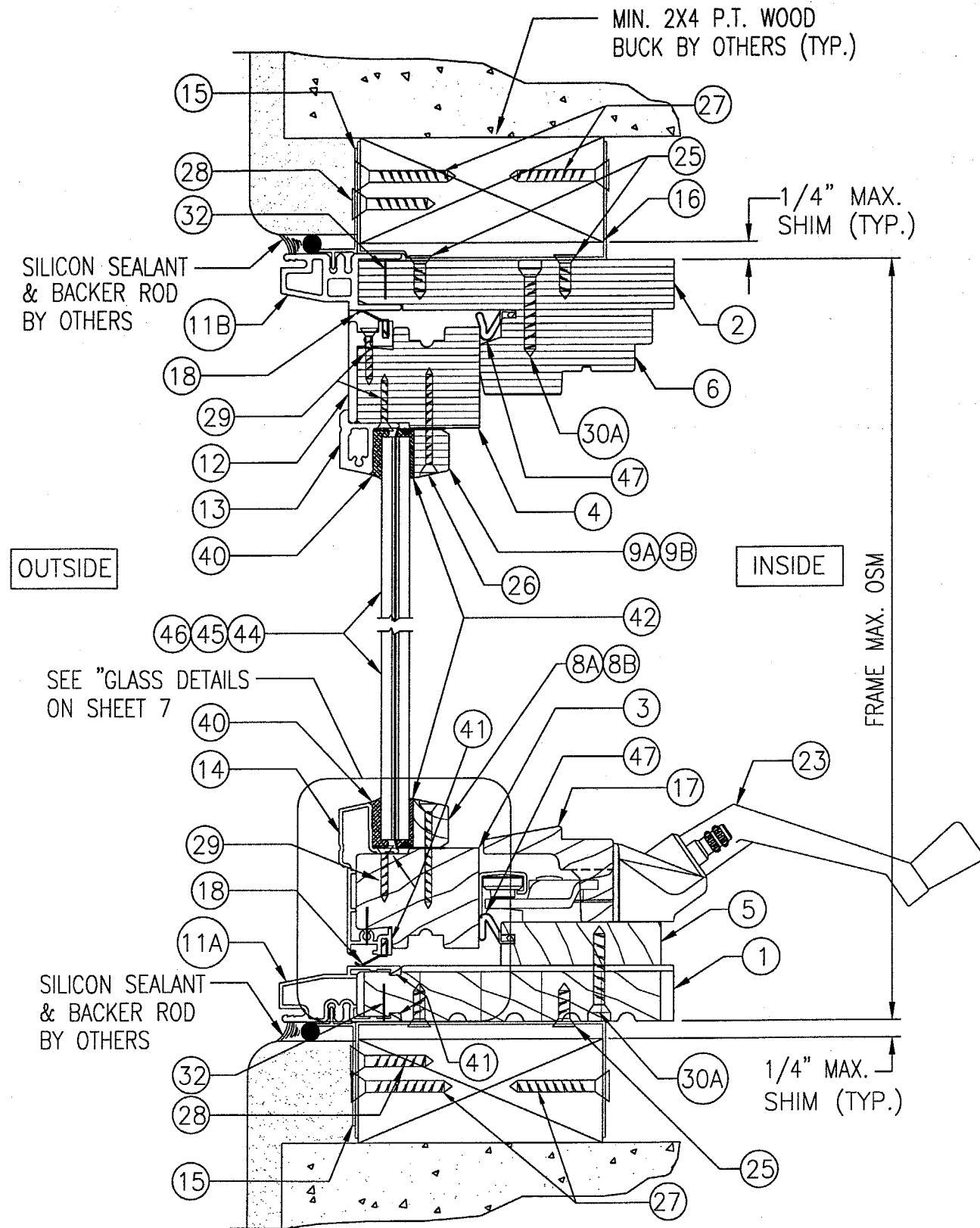


SECTION

B1
5

SCALE: HALF FULL SIZE
SEE "OPTIONAL JAMB DETAIL" ON
SHEET 7 FOR DIRECT MOUNT TO
BLOCK OR CONCRETE.

SHEAR SCREW
INSTALLATION



SECTION

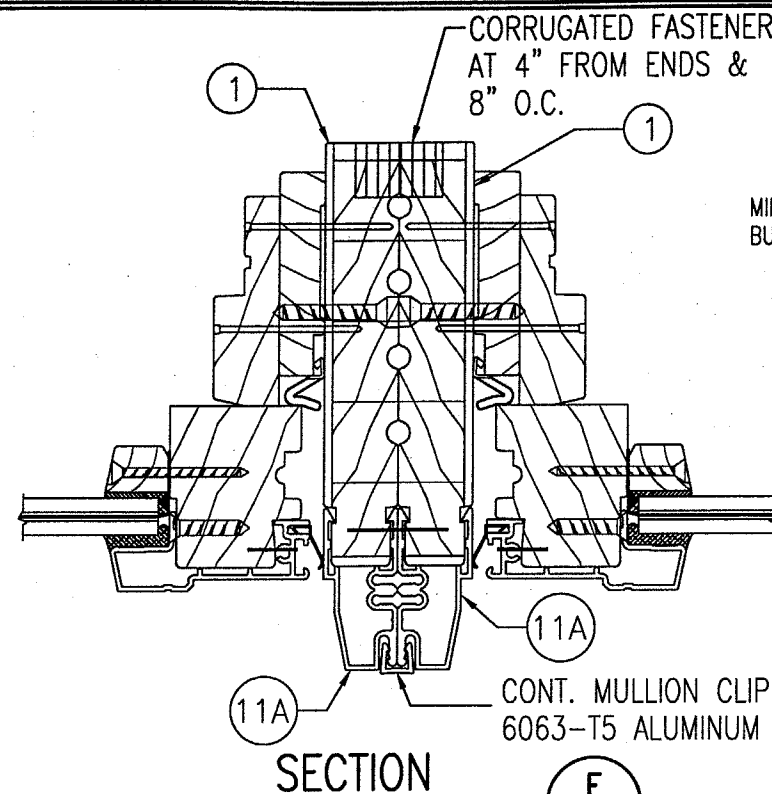
B2
5

SCALE: HALF FULL SIZE

CLIP
INSTALLATION

APPROVED AS COMPLYING WITH THE
SOUTH FLORIDA BUILDING CODE
DATE **SEP 27 2001**
BY *Manuel Perez*
PRODUCT CONTROL DIVISION
BUILDING CODE COMPLIANCE OFFICE
ACCEPTANCE NO. **60-1030.05**

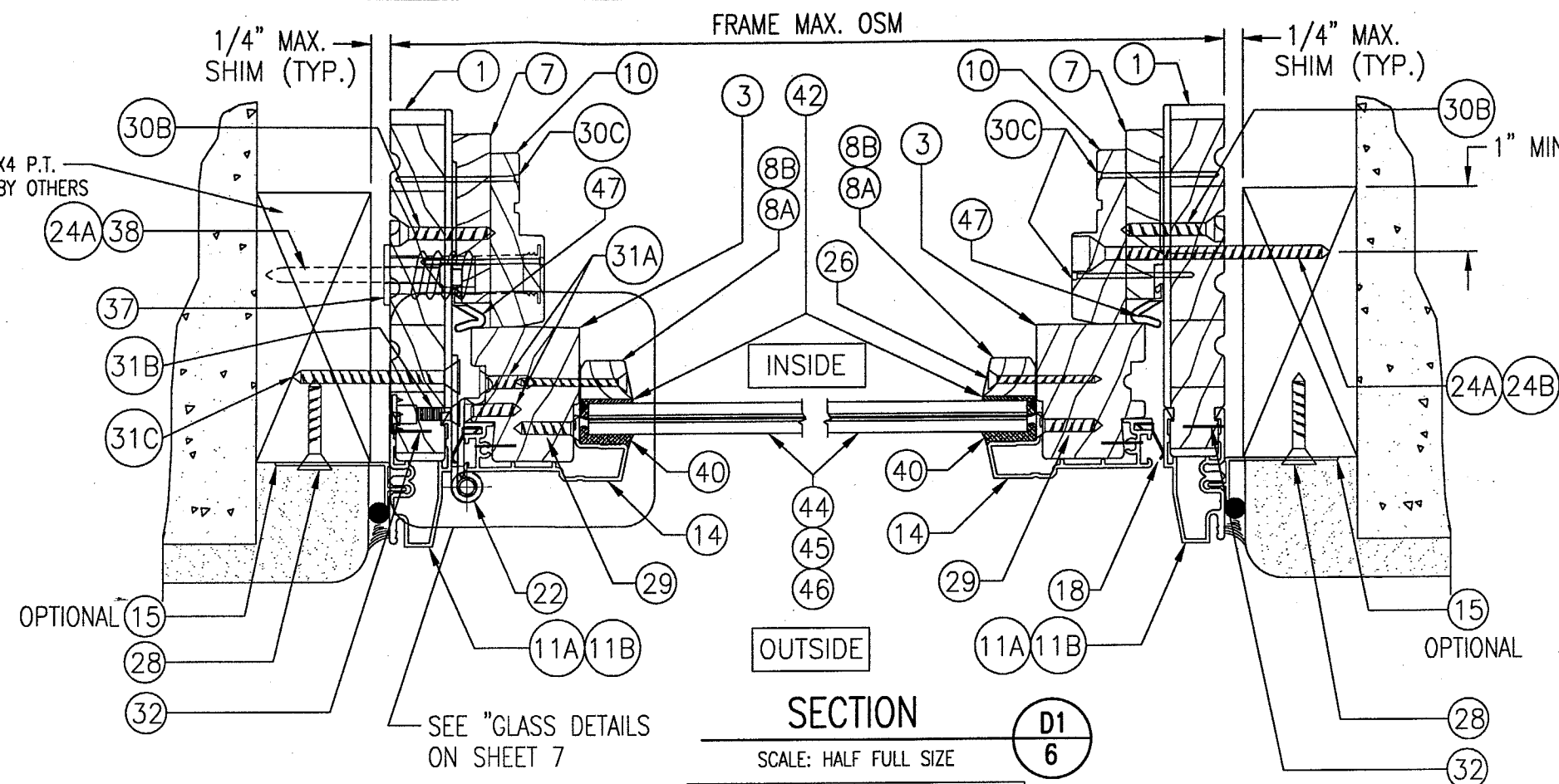
DRAWN BY: W.W.S.		DATE: 09/25/00	
CHECKED BY: W.W.S.		DATE: 09/25/00	
PLOT: 2:1			
NO.	REVISION	DESCRIPTION	DATE
DRAWING TITLE: ALUMINUM CLAD WOOD OPERABLE CASEMENT WINDOWS (DADE)		MANUFACTURER: KML WINDOWS, INC.	
CONSULTANTS: W. W. SCHAEFER ENGINEERING & CONSULTING, P.A.		23 BUCHANAN COURT	
600 SANDTREE DRIVE, SUITE 203B		LONDON, ONTARIO, CANADA N5Z4P9	
PALM BEACH GARDENS, FL 33403		(519)681-7012	
PHONE: 561-775-4902		FAX: 561-775-4903	
CERTIFICATION	AUG 30 2001 WARREN W. SCHAEFER, P.E. P.E. NO. 44135		
DRAWING NO. 1003C	REV.		
SHEET NO. 5	OF	10	



SECTION E 6

SCALE: HALF FULL SIZE

(FOR DETAIL & INFORMATION NOT SHOWN REFERENCE OTHER SECTIONS)

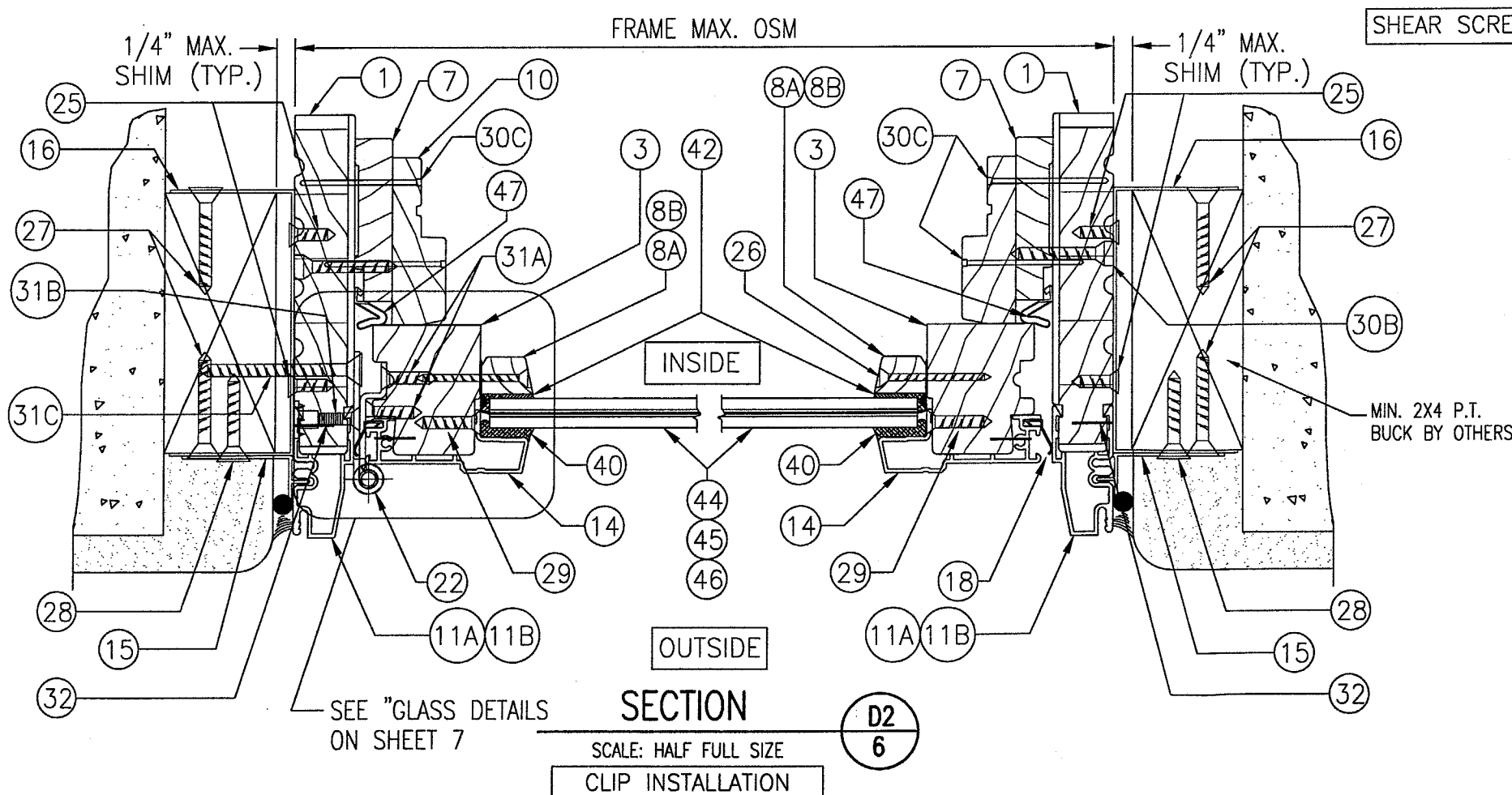


SECTION D1 6

SCALE: HALF FULL SIZE

SHEAR SCREW INSTALLATION

SEE "GLASS DETAILS ON SHEET 7"



SECTION D2 6

SCALE: HALF FULL SIZE

CLIP INSTALLATION

SEE "GLASS DETAILS ON SHEET 7"

DRAWN BY: W.W.S. DATE: 09/25/00
CHECKED BY: W.W.S. DATE: 09/25/00
PLOT: 2:1

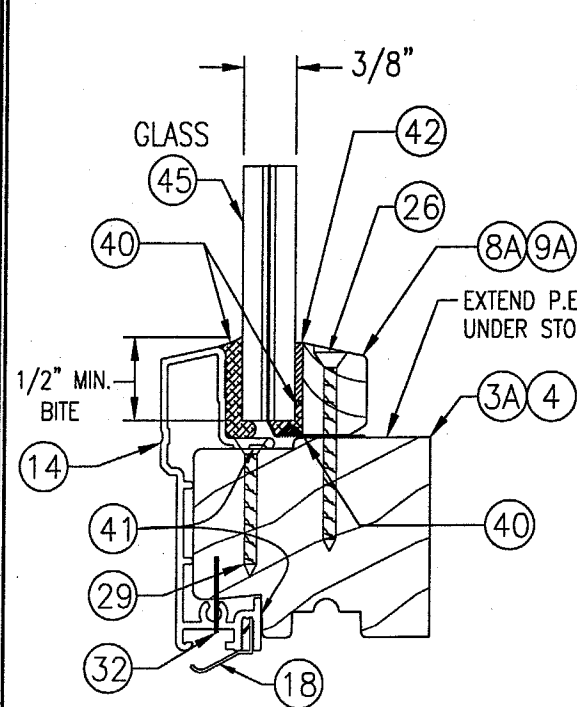
NO.	REVISION DESCRIPTION	DATE	BY

DRAWING TITLE: ALUMINUM CLAD WOOD OPERABLE CASEMENT WINDOWS (DADE)
MANUFACTURER: KML WINDOWS, INC.
CONSULTANTS: W. W. SCHAEFER ENGINEERING & CONSULTING, P.A.
23 BUCHANAN COURT
LONDON, ONTARIO, CANADA N5Z4P9
(519)681-7012
600 SANDTREE DRIVE, SUITE 203B
PALM BEACH GARDENS, FL 33403
PHONE: 561-775-4902 FAX: 561-775-4903

CERTIFICATION: AUG 30 2001
WARREN W. SCHAEFER, P.E.
P.E. NO. 44135

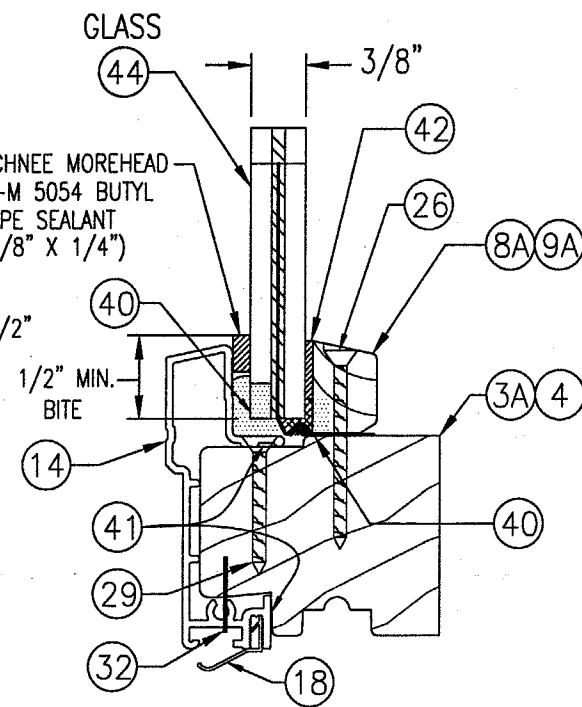
APPROVED AS COMPLYING WITH THE SOUTH FLORIDA BUILDING CODE
DATE: SEP 27 2001
BY: [Signature]
PRODUCT CONTROL DIVISION
BUILDING CODE COMPLIANCE OFFICE
ACCEPTANCE NO. 06-1030-05

DRAWING NO. 1003C
SHEET NO. 6 OF 10



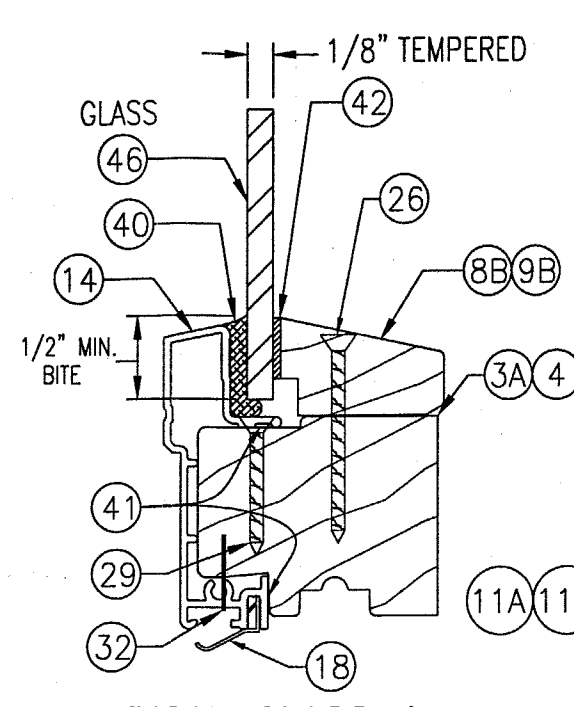
TYPICAL GLASS & GLAZING DETAIL IMPACT UNITS

SCALE: 3/4 FULL SIZE
(NEBULA GLASSLAM SAFETY-PLUS)
3/8" NEBULA GLASSLAM SAFETY-PLUS LAMINATED
GLASS WITH 1/8" ANNEALED/0.06" RESIN/
0.01" PET/0.06" RESIN/1/8" ANNEALED



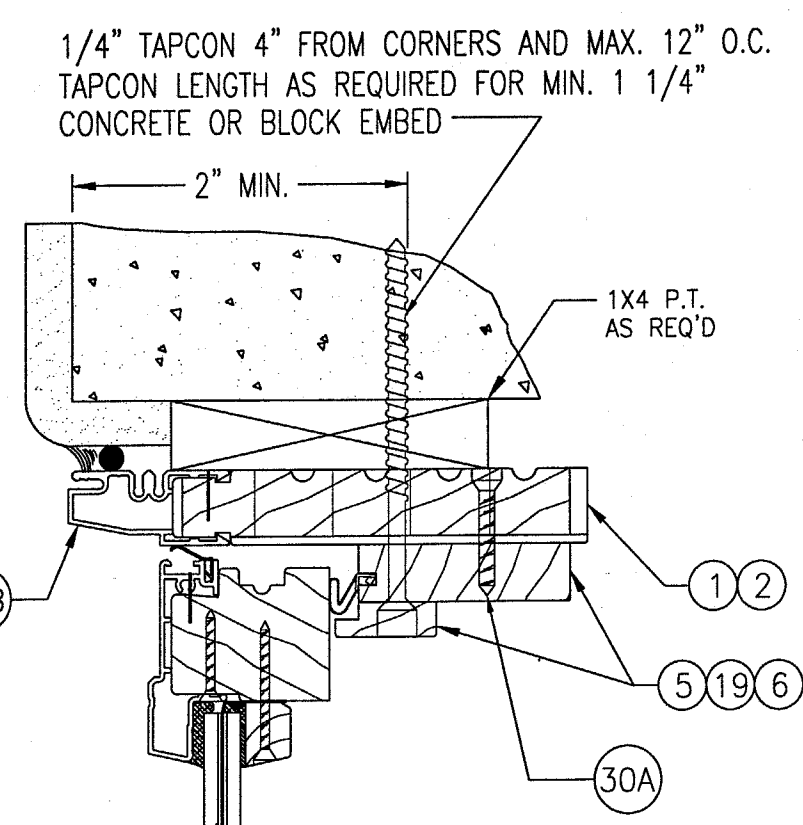
TYPICAL GLASS & GLAZING DETAIL IMPACT UNITS

SCALE: 3/4 FULL SIZE
(DUPONT PVB WITH DLUBAK STEP)
3/8" DUPONT DLUBAK "STEP-GLASS"
WITH 1/8" TEMPERED/0.120" PVB/
1/8" TEMPERED



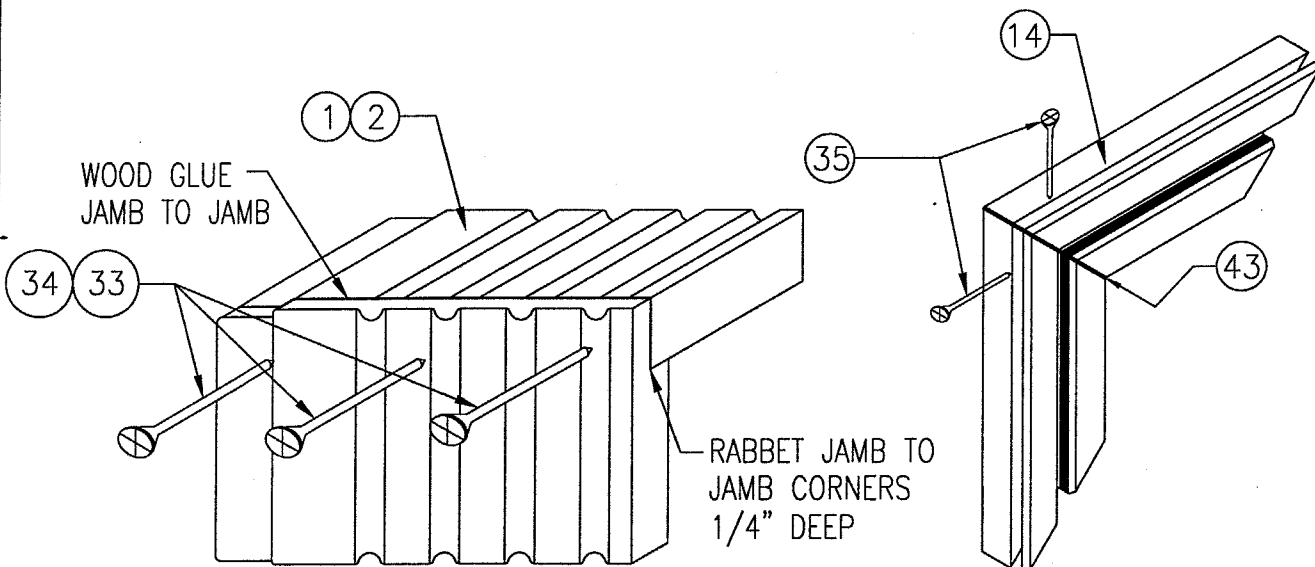
TYPICAL GLASS & GLAZING DETAIL NON-IMPACT UNITS

SCALE: 3/4 FULL SIZE
1/8" TEMPERED GLASS



OPTIONAL JAMB DETAIL FOR DIRECT MOUNT TO CONCRETE OR BLOCK

(TYP. ALL UNITS)
SCALE: 1/2 FULL SIZE



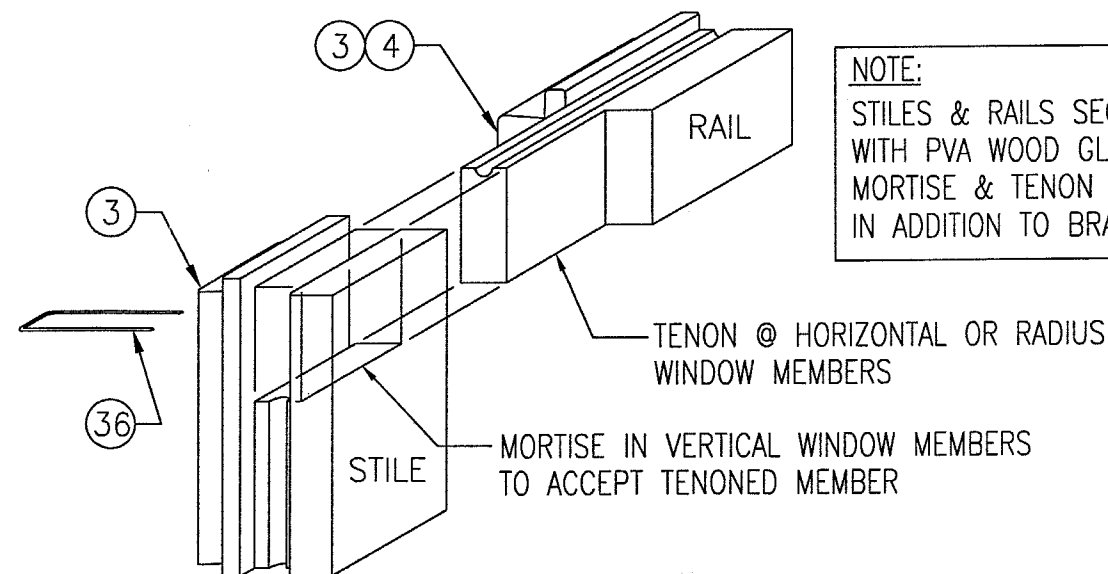
JAMB TO JAMB DETAIL

SCALE: N.T.S.

CLAD TO CLAD DETAIL

SCALE: N.T.S.

JAMB CORNER DETAILS



SASH STILE TO RAIL CORNER DETAIL

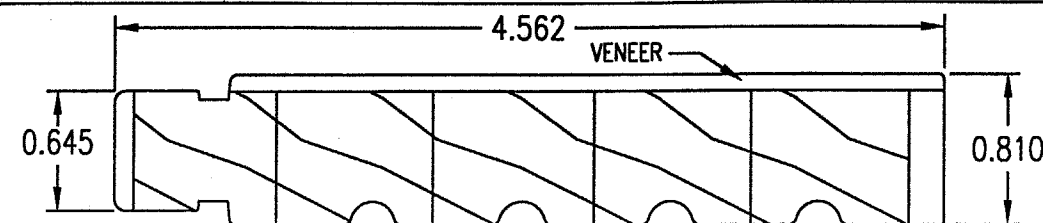
SCALE: N.T.S.

NOTE: CLAD CORNER IS MITERED & FASTENED WITH
1 NO. 6 X 1" SMS (26) INTO SPLINE & GASKETED
WITH (31) (SIMILAR TO JAMB CLAD CORNERS)

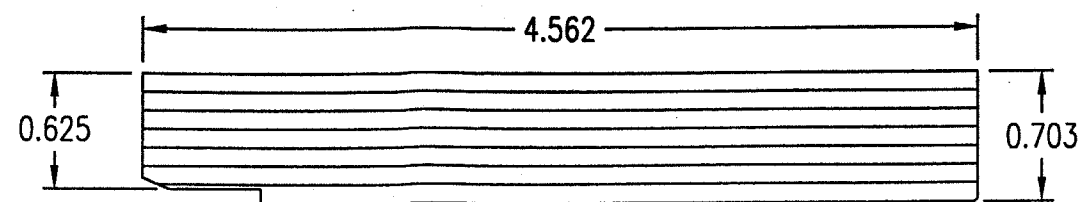
NOTE:
STILES & RAILS SECURED
WITH PVA WOOD GLUE @
MORTISE & TENON JOINTS
IN ADDITION TO BRAD NAILS

APPROVED AS COMPLYING WITH THE
SOUTH FLORIDA BUILDING CODE
DATE **SEP 27 2001**
BY *Warren W. Schaefer*
PRODUCT CONTROL DIVISION
BUILDING CODE COMPLIANCE OFFICE
ACCEPTANCE NO. **06-1030-05**

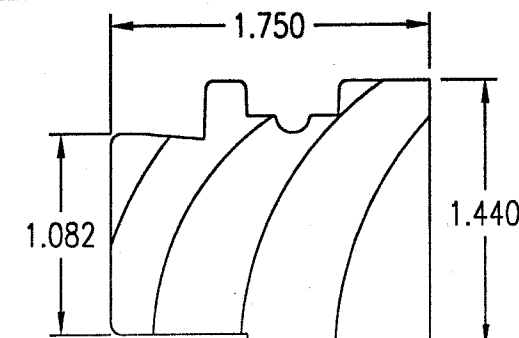
DRAWN BY: W.W.S.	DATE: 09/25/00
CHECKED BY: W.W.S.	DATE: 09/25/00
PLOT: 2:1	
NO.	DATE
BY	DATE
REVISION DESCRIPTION	DATE
DRAWING TITLE ALUMINUM CLAD WOOD OPERABLE CASEMENT WINDOWS (DADE)	
CONSULTANTS W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. 600 SANDTREE DRIVE, SUITE 203B PALM BEACH GARDENS, FL 33403 PHONE: 561-775-4902 FAX: 561-775-4903	
MANUFACTURER KML WINDOWS, INC. 23 BUCHANAN COURT LONDON, ONTARIO, CANADA N5Z4P9 (519)681-7012	
CERTIFICATION AUG 30 2001 <i>Warren W. Schaefer</i> WARREN W. SCHAEFER, P.E. P.E. NO. 44135	DRAWING NO. 1003C
SHEET NO. 7 OF 10	



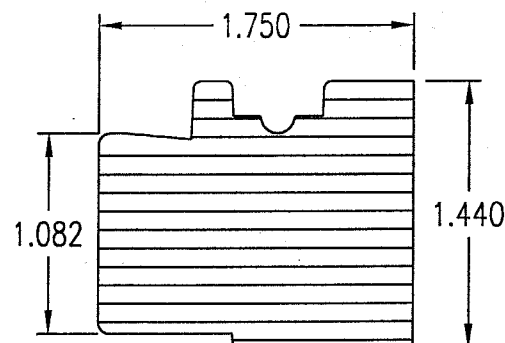
① LINEAL WOOD FRAME JAMB
PONDEROSA PINE LAMINATED IN 5 BLOCKS



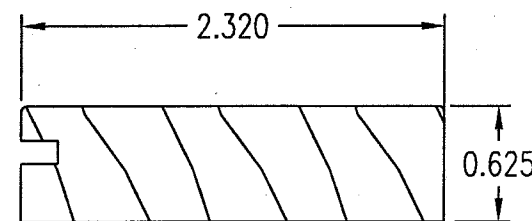
② RADIAL WOOD FRAME JAMB
(LAMINATED VENEER)



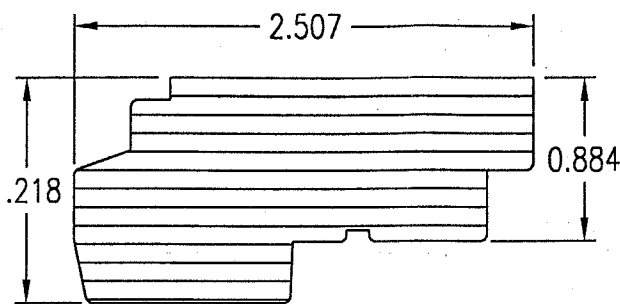
③ LINEAL SASH



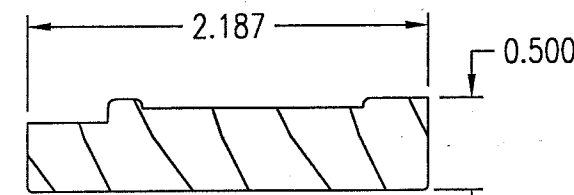
④ RADIAL SASH
(LAMINATED VENEER)



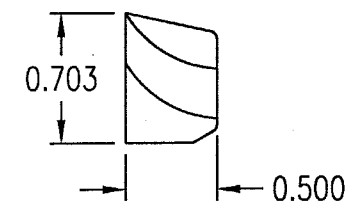
⑤ WEATHERSEAL ADAPTER



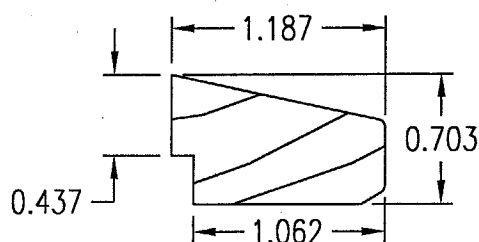
⑥ RADIAL SASH STOP
(LAMINATED VENEER)



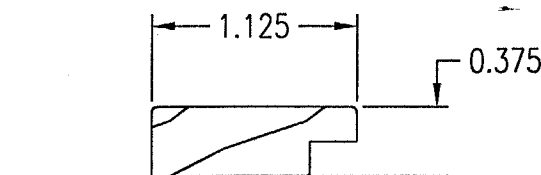
⑦ LINEAL SASH STOP
& W.S.A.



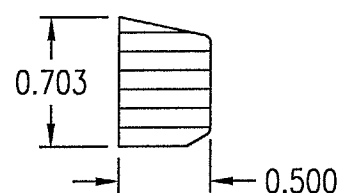
⑧A LINEAL WOOD
IMPACT GLAZING STOP



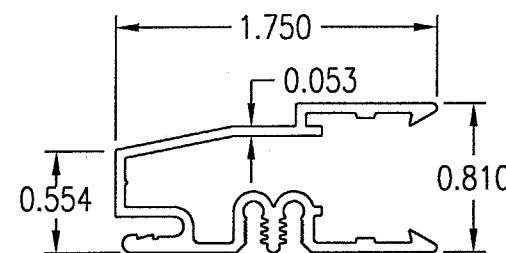
⑧B LINEAL WOOD
NON-IMPACT GLAZING STOP



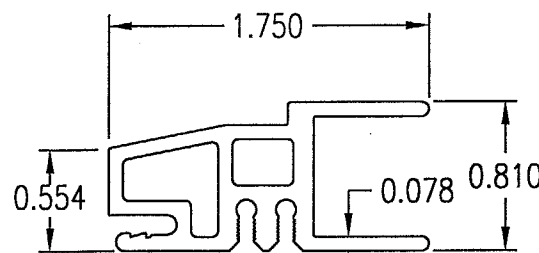
⑨ LINEAL SCREEN STOP



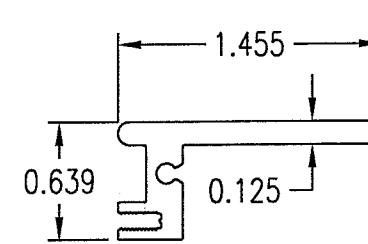
⑨A RADIAL WOOD
IMPACT GLAZING STOP
(LAMINATED VENEER)



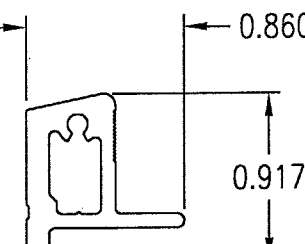
⑪A LINEAL
JAMB CLADDING
(6063-T5 ALUMINUM)



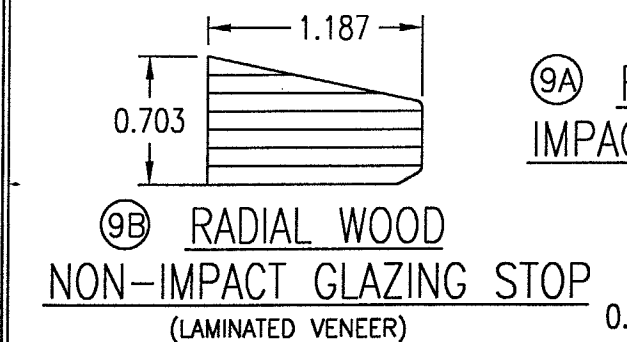
⑪B RADIAL
FRAME CLADDING
(6063-T5 ALUMINUM)



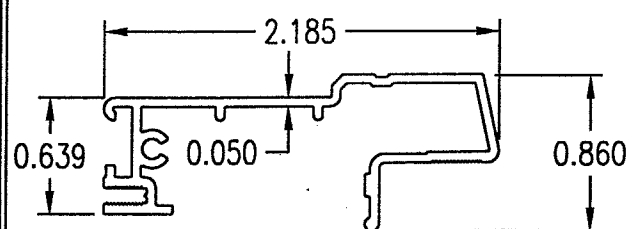
⑫ RADIAL
SASH CLADDING
(6063-T5 ALUMINUM)



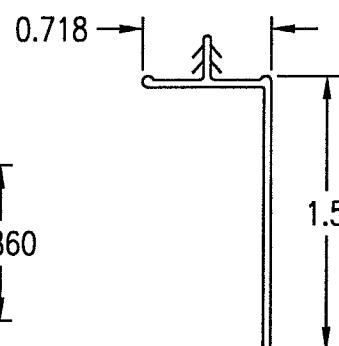
⑬ RADIAL
GLASS STOP
(6063-T5 ALUMINUM)



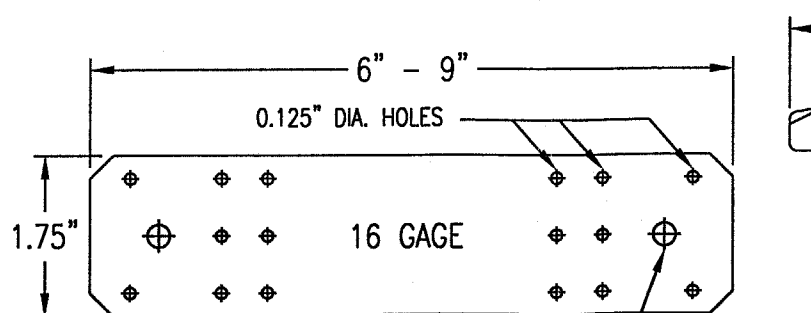
⑨B RADIAL WOOD
NON-IMPACT GLAZING STOP
(LAMINATED VENEER)



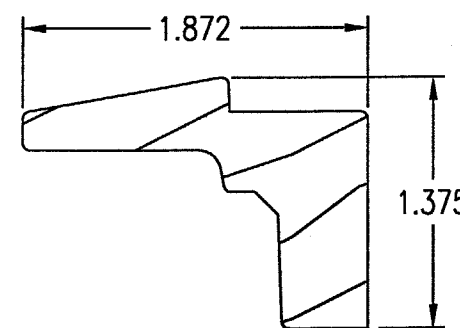
⑭ LINEAL
SASH CLADDING
(6063-T5 ALUMINUM)



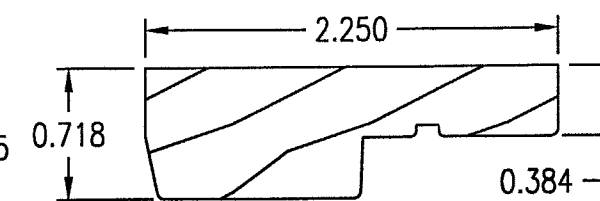
⑮ NAILING FIN
(VINYL)



⑯ INSTALLATION CLIP
(GALVANIZED STEEL)
Fy = 33 ksi MIN.




⑰ OPERATOR COVER



⑩ LINEAL SASH STOP COVER

APPROVED AS COMPLYING WITH THE
SOUTH FLORIDA BUILDING CODE
DATE **SEP 27 2001**
BY *M. M. M. M.*
PRODUCT CONTROL DIVISION
BUILDING CODE COMPLIANCE OFFICE
ACCEPTANCE NO. **00-1030-05**

DRAWING NO. 1003C		REV	DRAWN BY: W.W.S.		DATE: 09/25/00	
			CHECKED BY: W.W.S.		DATE: 09/25/00	
PLOT: 2:1						
DRAWING TITLE ALUMINUM CLAD WOOD OPERABLE CASEMENT WINDOWS (DADE)			NO.	REVISION DESCRIPTION	BY	DATE
CONSULTANTS W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. 600 SANDTREE DRIVE, SUITE 203B PALM BEACH GARDENS, FL 33403			MANUFACTURER KML WINDOWS, INC. 23 BUCHANAN COURT LONDON, ONTARIO, CANADA N5Z4P9 (519) 681-7012			
CERTIFICATION			AUG 30 2001			
WARREN W. SCHAEFER, P.E.						
DRAWING NO.		REV				
SHEET NO.						
8		OF	10			

DESIGN LOAD CAPACITY (PSF) FOR NON-IMPACT WINDOWS							
WINDOW SIZE (OSM)		RECTANGULAR		SHAPED		NUMBER OF HINGES	NUMBER OF LATCH POINTS
WIDTH	HEIGHT	POS	NEG	POS	NEG		
20"	24"	65.0	99.1	65.0	87.5	2	2
24"		65.0	82.6	65.0	72.9	2	2
28"		65.0	70.8	65.0	62.5	2	2
32"		65.0	61.9	65.0	54.7	2	2
35"		65.0	56.6	65.0	50.0	2	2
20"	30"	65.0	99.1	65.0	87.5	2	2
24"		65.0	82.6	65.0	72.9	2	2
28"		65.0	70.8	65.0	62.5	2	2
32"		65.0	61.9	65.0	54.7	2	2
35"		65.0	56.6	65.0	50.0	2	2
20"	36"	65.0	99.1	65.0	87.5	2	2
24"		65.0	82.6	65.0	72.9	2	2
28"		65.0	70.8	65.0	62.5	2	2
32"		65.0	61.9	65.0	54.7	2	2
35"		65.0	56.6	65.0	50.0	2	2
20"	42"	65.0	99.1	65.0	87.5	2	3
24"		65.0	82.6	65.0	72.9	2	3
28"		65.0	70.8	65.0	62.5	2	3
32"		65.0	61.9	65.0	54.7	2	3
35"		65.0	56.6	65.0	50.0	2	3
20"	48"	65.0	99.1	65.0	87.5	2	3
24"		65.0	82.6	65.0	72.9	2	3
28"		65.0	70.8	65.0	62.5	2	3
32"		65.0	61.9	65.0	54.7	2	3
35"		65.0	56.6	65.0	50.0	2	3
20"	54"	65.0	96.2	65.0	85.0	3	3
24"		65.0	82.6	65.0	72.9	3	3
28"		65.0	70.8	65.0	62.5	3	3
32"		65.0	61.9	65.0	54.7	3	3
35"		65.0	56.6	65.0	50.0	3	3
20"	60"	65.0	94.1	65.0	83.1	3	4
24"		65.0	81.7	65.0	72.1	3	4
28"		65.0	70.8	65.0	62.5	3	4
32"		65.0	61.9	65.0	54.7	3	4
35"		65.0	56.6	65.0	50.0	3	4


DESIGN LOAD CAPACITY (PSF) FOR NON-IMPACT WINDOWS							
WINDOW SIZE (OSM)		RECTANGULAR		SHAPED		NUMBER OF HINGES	NUMBER OF LATCH POINTS
WIDTH	HEIGHT	POS	NEG	POS	NEG		
20"	66"	65.0	92.4	65.0	81.6	3	4
24"		65.0	79.9	65.0	70.5	3	4
28"		65.0	70.8	65.0	62.5	3	4
32"		65.0	61.9	65.0	54.7	3	4
35"		65.0	56.6	65.0	50.0	3	4
20"	72"	65.0	91.0	65.0	80.4	3	5
24"		65.0	78.4	65.0	69.2	3	5
28"		65.0	69.5	65.0	61.4	3	5
32"		65.0	61.9	65.0	54.7	3	5
35"		65.0	56.6	65.0	50.0	3	5
20"	78"	65.0	89.9	65.0	79.4	3	5
24"		65.0	77.2	65.0	68.2	3	5
28"		65.0	68.2	65.0	60.3	3	5
32"		65.0	61.7	65.0	54.5	3	5
35"		65.0	56.6	65.0	50.0	3	5
20"	84"	65.0	89.0	65.0	78.6	3	5
24"		65.0	76.2	65.0	67.3	3	5
28"		65.0	67.2	65.0	59.3	3	5
32"		65.0	60.6	65.0	53.5	3	5
35"		65.0	56.6	65.0	50.0	3	5

1. THE LOADS IN THESE TABLES ARE AS DETERMINED BY TESTING & COMPARATIVE ANALYSIS WITH THE CONTROLLING FACTOR BEING THE WORSE CASE OF: GLASS SIZE & AREA, UNIT AREA, NUMBER OF HINGES, NUMBER OF LOCKING POINTS, NUMBER OF SNUBBERS, OR FASTENER CAPABILITIES.
2. THE LOADS IN THESE TABLES ARE FOR NON-IMPACT RATED WINDOWS ONLY. FOR IMPACT WINDOWS, SEE DESIGN LOAD TABLE ON SHEET 1.
3. THE LOADS IN THESE TABLES MAY NOT BE INTERPOLATED.
4. FOR MULLED UNITS AND THERE ALLOWABLE LOADS, REFER TO SHEET 3 OF THIS DRAWING AND/OR MULLION DRAWING 1003E. NO INCREASE IN LOAD FOR JAMB TO JAMB UNREINFORCED MULLED UNITS IS ALLOWED OVER THAT SPECIFIED ON SHEET 3. IF WINDOW SIZE REQUIREMENTS & LOAD REQUIREMENTS DO NOT MEET THOSE SPECIFIED ON SHEET 3, A REINFORCED MULLION MUST BE USED IN ACCORDANCE WITH DRAWING 1003E.

[illegible]

MATERIAL LIST			
PART NO.	REF. NO.	DESCRIPTION	NOTES
PARTS & EXTRUSIONS			
1	PF1010	LINEAL JAMB	SEE NOTE 1 THIS SHEET.
2	PF1231	RADIAL JAMB	LAMINATED VENEER
3	PF1007	LINEAL SASH	SEE NOTE 1 THIS SHEET.
4	PF1015	RADIAL SASH	LAMINATED VENEER
5	PF1024	WEATHERSEAL ADAPTER	SEE NOTE 1 THIS SHEET.
6	PF1005	RADIAL SASH STOP	LAMINATED VENEER
7	PF1351	LINEAL SASH STOP W.S.A.	SEE NOTE 1 THIS SHEET.
8A	PF1011	LINEAL GLAZING STOP	SEE NOTE 1 (USE WITH IMPACT UNITS)
8B	PF1008	LINEAL GLAZING STOP	SEE NOTE 1 (USE WITH NON-IMPACT UNITS)
9A	PF1011	RADIAL GLAZING STOP	LAMINATED VENEER (USE WITH IMPACT UNITS)
9B	PF1008	RADIAL GLAZING STOP	LAM. VENEER (USE WITH NON-IMPACT UNITS)
10	PF1485	LINEAL SASH STOP\COVER	SEE NOTE 1 THIS SHEET.
11A	PF1001	LINEAL JAMB CLADDING	ALUMINUM 6063-T5
11B	PF1002	RADIAL JAMB CLADDING	ALUMINUM 6063-T5
12	PF1018	RADIAL SASH CLADDING	ALUMINUM 6063-T5
13	PF1017	RADIAL GLASS STOP	ALUMINUM 6063-T5
14	PF1074	LINEAL SASH CLADDING	ALUMINUM 6063-T5
15	PF1214 OR PF1326	VINYL NAILING FINIS	OPTIONAL WITH SHEAR SCREW INSTALLATION
16	SK1031	GALV. 16 GA. STEEL INSTALLATION CLIP (Fy = 33 KSI MIN.)	GALVANIZED STEEL, INC. MAX. 4" FROM CORNERS & 12" O.C.
17	PF1009	OPERATOR COVER	SEE NOTE 1 THIS SHEET.
18	PF1026	0.415" X 0.489" RAINSKIRT	SCHLEGEL: EXTRUDED FLEXIBLE COPOLYMER
19	PF1012	LINEAL SCREEN STOP	SEE NOTE 1 THIS SHEET.
20	-	OPEN	
21	-	CONCEALED MULTI-POINT LOCK	MIRAGE 16 SERIES MULTI-POINT SYSTEM
22	SK1002	KML S.S. BUTT HINGE	FOR USE WITH ALL WINDOW SHAPES
23	-	SINGLE ARM OPERATOR	TRUTH HARDWARE ENTRYGUARD OR EQUAL
FASTENERS			
24A	-	#10 SMS JAMB SHEAR SCREW	WITHIN 4" FROM CORNERS & MAX. 12" O.C.
24B	-	#10 SMS JAMB SHEAR SCREW	1 ADDITIONAL EA. SIDE OF MULLION ENDS
25	-	#8 x 5/8" PAN HEAD SMS SCREW	2 PER CLIP INTO JAMB
26	-	#6 X 1 5/8" SMS SCREW	WITHIN 3" FROM CORNERS & MAX. 8" O.C.
27	-	#8 x 1 1/4" SMS SCREW	2 PER CLIP INTO BUCK (1 EA. SIDE OF BUCK)
28	-	S.S. #8 x 1 1/4" SMS SCREW OR 1 5/8" DRYWALL SCREWS	WITHIN 4" FROM ENDS & MAX. 10 1/2" O.C. WITH FIN
29	-	#6 x 3/4" SMS SCREW	WITHIN 3" FROM CORNERS & 8" O.C.

MATERIAL LIST			
PART NO.	REF. NO.	DESCRIPTION	NOTES
30A	-	#8 x 1 1/4" SMS SCREW	4" FROM CORNERS & 8" O.C. (AT RADIAL SASH STOPS)
30B	-	#8 x 1" SMS SCREW	4" FROM CORNERS & 8" O.C. (AT LINEAL SASH STOPS)
30C	-	F-14 X 1 5/8" BRAD NAILS	2 @ 4" FROM CORNERS & 8" O.C. @ SIDES
31A	-	#8 X 1" SMS SCREW	5 PER HINGE LEAF INTO SASH (S/S OR BRASS)
31B	-	10-24 FH MACH SCREW W/T-NUT	2 PER HINGE LEAF INTO JAMB (S/S OR BRASS)
31C	-	#10 x 3" SMS SCREW	2 PER HINGE LEAF INTO BUCK (S/S OR BRASS)
32	-	3/8" LONG STAPLE	WITHIN 3" FROM CORNERS & MAX. 8" O.C
33	-	#8 x 2" SMS SCREW	3 @ EACH RECTANGULAR JAMB CORNER
34	-	#8 x 1 1/2" SMS SCREW	3 @ EACH RADIUS JAMB CORNER
35	-	#6 x 3/4" SMS SCREW	2 @ EACH CLAD CORNER INTO CLAD SPLINES
36	-	16 GA. x 1 1/2" LONG STAPLE	1 @ EXTERIOR SIDE OF SASH STILE & RAIL MORTISE & TENON CONNECTION
37	-	JAMB JACK III	TRUTH HARDWARE NO. 21150: @ HINGE JAMB 1 WITH EA. JAMB JACK SCREW
38	-	JAMB JACK III SCREW	TRUTH HARDWARE NO. 21171: @ HINGE JAMB 3.15" LONG; 1 PER WINDOW @ SHAPED UNITS
SEALANTS			
40	-	DOW 995 SILICONE	FOR 1/2" GLAZING BITE
41	-	STRUCTURAL SILICONE ADHESIVE	DOW 1199 CONTINUOUS CLADDING TO JAMB
OTHER			
42	-	NORTON NORGLAZE .0625" X .437" GLAZING TAPE	POLYOLEFIN FOAM W/ ACRYLIC ADHESIVE
43	-	TREMCO 440 BUTYL TAPE GASKET	TRIM OFF AT EDGES (TYP. AT JAMB & SASH CLAD CORNERS)
44	-	3/8" LAMINATED TEMPERED GLASS "DUPONT PVB WITH DLUBAK STEP"	1/8" TEMPERED/0.120 PVB/1/8" TEMPERED
45	-	3/8" LAMINATED HEAT STR. GLASS NEBULA GLASSLAM SAFETY-PLUS	1/8" ANNEALED/0.06 RESIN/0.01 P.E.T./ 0.06 RESIN/ 1/8" ANNEALED
46	-	1/8" THICK TEMPERED GLASS	
47	PF1013	FRAME WEATHERSEAL	MONSANTO "SANTOPRENE": FOAMED ELASTOMERIC


 ALL WOOD USED WITH TESTED UNITS IS MINIMUM GRADE 2 PONDEROSA PINE (JAMBS ARE 5-BLOCK LAMINATED STAGE BLOCK). ALTERNATE WOOD SPECIES ACCEPTABLE WITH THIS PRODUCT ARE THE FOLLOWING MINIMUM GRADE 2 WOODS: (JAMBS MUST BE 5-BLOCK LAMINATED):

1. MAHOGANY
2. OAK
3. CHERRY
4. CYPRUS
5. DOUGLAS FIR
6. MAPLE
7. TEAK

APPROVED AS COMPLYING WITH THE SOUTH FLORIDA BUILDING CODE
 DATE SEP 27 2001
 BY Manuel Perez
 PRODUCT CONTROL DIVISION
 BUILDING CODE COMPLIANCE OFFICE
 ACCEPTANCE NO. 00-1030-05

DRAWN BY: W.W.S.		DATE: 09/25/00	
CHECKED BY: W.W.S.		DATE: 09/25/00	
PLOT: FULL			
DATE	BY	REVISION	DESCRIPTION
NO.			
DRAWING TITLE: ALUMINUM CLAD WOOD OPERABLE CASEMENT WINDOWS (DADE)			
MANUFACTURER: KML WINDOWS, INC. 23 BUCHANAN COURT LONDON, ONTARIO, CANADA N5Z4P9 (519)681-7012			
CONSULTANTS: W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. 600 SANDTREE DRIVE, SUITE 203B PALM BEACH GARDENS, FL 33403 PHONE: 561-775-4902 FAX: 561-775-4903			
CERTIFICATION: AUG 30 2001			
WARREN W. SCHAEFER, P.E. P.E. NO. 44135			
DRAWING NO. 1003C		REV.	
SHEET NO. 10		OF 10	